This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

OBSTETRICAL TRANSACTIONS.

VOL. XXVII.

TRANSACTIONS

OF THE

OBSTETRICAL SOCIETY

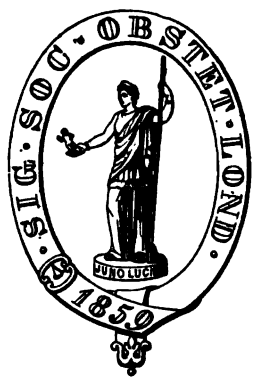
OF

LONDON.

VOL. XXVII.

FOR THE YEAR 1885.

WITH A LIST OF OFFICERS, FELLOWS, ETC.



LONDON:
LONGMANS, GREEN, AND CO.
1886.

PRINTED BY J. E. ADLARD, BARTHOLOMEW CLOSE.

OBSTETRICAL SOCIETY OF LONDON.

OFFICERS FOR 1886.

ELECTED FEBRUARY 3RD, 1886.

HONORARY PRESIDENT.	FARRE, ARTHUR, M.D., F.R.S.
PRESIDENT.	POTTER, JOHN BAPTISTE, M.D.
VICE-PRESIDENTS.	BLACK, JAMES WATT, M.D. BURCHELL, PETER LODWICK, M.B. CULLINGWORTH, C. J., M.D. (Manchester). DAY, WILLIAM HENRY, M.D. HERMAN, GEORGE ERNEST, M.B. MALINS, EDWARD, M.D. (Birmingham).
TREASURER.	GALABIN, ALFRED LEWIS, M.A., M.D.
CHAIRMAN OF THE BOARD FOR THE EXAMINATION OF MIDWIVES.	WILLIAMS, JOHN, M.D.
HONORARY SECRETARIES.	CHAMPNEYS, FRANCIS HENRY, M.A., M.B. THORNTON, JOHN KNOWSLEY, M.B., C.M.
HONORARY LIBRARIAN.	BOULTON, PERCY, M.D.
HONORARY MEMBERS OF COUNCIL.	OLDHAM, HENRY, M.D. (*Trustee*). BARNES, ROBERT, M.D. (*Trustee*). HEWITT, GRAILY, M.D. HICKS, JOHN BRAXTON, M.D., F.R.S. TILT, EDWARD JOHN, M.D. PRIESTLEY, WILLIAM O., M.D. WEST, CHARLES, M.D. GERVIS, HENRY, M.D. WELLS, SIR THOS. SPENCER, BART. (*Trustee*).
OTHER MEMBERS OF COUNCIL.	ARGLES, FRANK. BATTEN, RAYNER W., M.D. (Gloucester). BURD, EDWARD, M.D. (Shrewsbury). DUNCAN, J. MATTHEWS, M.D., F.R.S. DUNCAN, WILLIAM A., M.D. ELKINGTON, ARTHUR G. (Surgeon-Major). GIBBINGS, ALFRED THOMAS, M.D. GRIFFITH, JOHN T., M.D. GRIFFITH, WALTER S. A., M.B. HALLOWES, FREDERICK B. (Redhill). HORROCKS, PETER, M.D. JONES, EVAN (Aberdare). LAWRENCE, ALFRED E. A., M.D. (Bristol). MEREDITH, WILLIAM A., M.B., C.M. ROPER, ARTHUR. ROUTH, AMAND J. McC., M.D. TAIT, EDWARD W. WALTERS, JAMES HOPKINS, (Reading).

LIST OF PAST PRESIDENTS OF THE SOCIETY.

1859 EDWARD RIGBY, M.D.
1861 WILLIAM TYLER SMITH, M.D.
1863 HENRY OLDHAM, M.D.
1865 ROBERT BARNES, M.D.
1867 JOHN HALL DAVIS, M.D.
1869 GRAILY HEWITT, M.D.
1871 JOHN BRAXTON HICKS, M.D., F.R.S.
1873 EDWARD JOHN TILT, M.D.
1875 WILLIAM OVEREND PRIESTLEY, M.D.
1877 CHARLES WEST, M.D.
1879 WILLIAM S. PLAYFAIR, M.D.
1881 J. MATTHEWS DUNCAN, M.D., F.R.S.
1883 HENRY GERVIS, M.D.

REFEREES OF PAPERS FOR THE YEAR 1886

APPOINTED BY THE COUNCIL.

BLACK, J. WATT, M.D.
CULLINGWORTH, CHARLES JAMES, M.D.
DUNCAN, JAMES MATTHEWS, M.D., F.R.S.
GALABIN, ALFRED LEWIS, M.A., M.D.
GERVIS, HENRY, M.D.
GODSON, CLEMENT, M.D.
HERMAN, G. ERNEST, M.B.
HEWITT, GRAILY, M.D.
HICKS, JOHN BRAXTON, M.D., F.R.S.
LEISHMAN, WILLIAM, M.D., Glasgow.
MALINS, EDWARD, M.D., Birmingham.
MURRAY, GUSTAVUS CHARLES P., M.D.
PLAYFAIR, WILLIAM S., M.D.
PRIESTLEY, WILLIAM O., M.D.
ROPER, GEORGE, M.D.
STEPHENSON, WILLIAM, M.D., Aberdeen.
WELLS, SIR T. SPENCER, BART., F.R.C.S.
WILLIAMS, JOHN, M.D.

STANDING COMMITTEES.

BOARD FOR THE EXAMINATION OF MIDWIVES.

CHAIRMAN. WILLIAMS, JOHN, M.D.
BURCHELL, PETER LODWICK, M.B.
HERMAN, G. ERNEST, M.B.
ROPER, GEORGE, M.D.

EX-OFFICIO. CHAMPNEYS, FRANCIS HENRY, M.A., M.B., *Hon. Sec.*
THORNTON, J. KNOWSLEY, M.B., *Hon. Sec.*

LIBRARY COMMITTEE.

DORAN, ALBAN.
DUNCAN, J. MATTHEWS, M.D., F.R.S.
DUNCAN, WILLIAM A., M.D.
HERMAN, G. ERNEST, M.B.
WILLIAMS, JOHN, M.D.

EX-OFFICIO. POTTER, JOHN BAPTISTE, M.D., *President.*
GALABIN, ALFRED LEWIS, M.D., *Treasurer.*
CHAMPNEYS, FRANCIS HENRY, M.A., M.B. } *Hon. Secs.*
THORNTON, J. KNOWSLEY, M.B. } *Hon. Secs.*
BOULTON, PERCY, M.D., *Hon. Lib.*

PUBLICATION COMMITTEE.

DALY, FREDERICK HENRY, M.D.
GALABIN, ALFRED LEWIS, M.A., M.D.
GERVIS, HENRY, M.D.
HERMAN, G. ERNEST, M.B.
HEWITT, GRAILY, M.D.
PLAYFAIR, WILLIAM S., M.D.
WILLIAMS, JOHN, M.D.

EX-OFFICIO. POTTER, JOHN BAPTISTE, M.D., *President.*
CHAMPNEYS, FRANCIS HENRY, M.A., M.B. } *Hon. Secs.*
THORNTON, J. KNOWSLEY, M.B. } *Hon. Secs.*

HONORARY LOCAL SECRETARIES.

Jones, Evan	Aberdare.
Bartrum, John S., F.R.C.S.	Bath.
Corry, Thomas C. S., M.D.	Belfast.
Savage, Thomas, M.D.	Birmingham
Salzmann, Frederick William	Brighton.
Swayne, Joseph Griffiths, M.D.	Bristol.
Carlyle, David, M.D.	Carlisle.
Batten, Rayner W., M.D.	Gloucester.
Clark, James Fenn	Leamington.
Braithwaite, James, M.D.	Leeds.
Wallace, John, M.D.	Liverpool.
Roberts, David Lloyd, M.D.	Manchester.
Jackson, Edward, M.B.	Newcastle-on-Tyne.
Elder, George, M.D., C.M.	Nottingham.
Walker, Thomas James, M.D.	Peterborough.
Eyeley, Joseph Frederick, L.R.C.P.	Plymouth.
Harrinson, Isaac, Esq., F.R.C.S.	Reading.
Wilson, Robert James, F.R.C.P. Ed.	St. Leonard's.
Taylor, John W., M.D.	Scarborough.
Keeling, James Hurd, M.D.	Sheffield.
Burd, Edward, M.D., C.M.	Shrewsbury.
Murphy, James, M.D.	Sunderland.
Fowler, James	Wakefield.
Childs, Christopher, M.B.	Weymouth.
Harris, William John	Worthing.
Harvey, Robert, M.D.	Calcutta.
Branfoot, Arthur Mudge, M.B.	Madras.
Perrigo, James, M.D.	Montreal, Canada
Temple, James Algernon, M.D.	Toronto, Canada West.
Anderson, Izett W., M.D.	Jamaica.
Takaki, Kanaheiro, F.R.C.S.	Japan.

OBSTETRICAL SOCIETY OF LONDON.

TRUSTEES OF THE SOCIETY'S PROPERTY.

HENRY OLDHAM, M.D.
ROBERT BARNES, M.D.
Sir THOMAS SPENCER WELLS, Bart.

HONORARY FELLOWS.

BRITISH SUBJECTS.

Elected

1862 DUNCAN, JAMES MATTHEWS, M.D., A.M., LL.D., F.R.S. Physician-Accoucheur to, and Lecturer on Midwifery and Diseases of Women and Children at, St. Bartholomew's Hospital; 71, Brook street, Grosvenor square, W. *Council*, 1878-80, 1886. *Pres.* 1881-82. *Trans.* 17.

1870 FARRE, ARTHUR, M.D., F.R.S. (HON. PRES.), Physician-Accoucheur to H.R.H. the Princess of Wales; 18, Albert Mansions, Victoria street, Westminster. *Trans.* 1.

1871 KEILLER, ALEXANDER, M.D., F.R.S. Ed., Physician to the Royal Maternity Hospital, Lecturer on Midwifery and Diseases of Women and Children at Surgeons' Hall, Edinburgh; 21, Queen Street, Edinburgh.

1871 KIDD, GEORGE H., M.D., F.R.C.S.I., Obstetrical Surgeon to the Coombe Lying-in Hospital, and Examiner in Midwifery at the Queen's University and Royal College of Surgeons of Ireland; 30, Merrion square south, Dublin.

Elected

1870 WEST, CHARLES, M.D., F.R.C.P., Corresponding Member of the Academy of Medicine of Paris; 55, Harley street, W. *Pres.* 1877-8.

FOREIGN SUBJECTS.

1872 BARKER, FORDYCE, M.D., Professor of Clinical Midwifery and Diseases of Women at the Bellevue Hospital Medical College, and Obstetric Physician to the Bellevue Hospital; Consulting Physician to the New York State Woman's Hospital, &c.; 85, Madison avenue, New York.

1863 BRAUN, CARL, M.D., Professor of Midwifery, Vienna.

1875 COURTY, AMEDÉE, M.D., Clinical Professor at the Faculty of Medicine of Montpellier.

1863 FAYE, F. C., M.D., Professor of Midwifery in the University of Christiania.

1866 HUGENBERGER, THEODOR, M.D., à la Maternité et aux Enfants Trouvés Hôpital des Accouchements, Moscow.

1866 LAZAREWITCH, J., M.D., Kharkoff, Russia. *Trans.* 3.

1864 PAJOT, CH. M.D., Professor of Midwifery to the Faculty of Medicine, Paris.

1862 SCANZONI, F. W. VON, M.D., Professor of Midwifery, Würzburg.

1877 STOLTZ, Professor, M.D. Nancy.

1866 THOMAS, ABRAHAM EVERARD SIMON, M.D., Leyden.

1872 THOMAS, T. GAILLARD, M.D., Professor of Obstetrics in the College of Physicians and Surgeons; 296, Fifth avenue, New York.

1862 VIRCHOW, RUDOLF, M.D., Professor of Pathological Anatomy in the University of Berlin.

CORRESPONDING FELLOWS.

Elected

1873 MARTIN, A. E., M.D., Berlin. *Trans.* 1.

1876 BUDIN, P., M.D., 22, Rue de l'Odéon, Paris. *Trans.* 1.

1876 CHADWICK, JAMES R., M.A., M.D., Physician for Diseases of Women, Boston City Hospital; Clarendon street, Boston, Massachusetts, U.S.

1877 GOODELL, WILLIAM, A.M., M.D., Professor of Clinical Gynæcology in the University of Pennsylvania; Philadelphia, Pennsylvania.

1876 LUSK, WILLIAM THOMPSON, M.D., Professor of Obstetrics, Bellevue Hospital Medical College; New York.

1876 PREVÔT, OSCAR, M.D., Moscow.

1877 STORER, HORATIO, M.D., Boston, Massachusetts, U.S.A.

ORDINARY FELLOWS.

JANUARY 1886.

Those marked thus (*) have paid the Composition Fee in lieu of further annual subscriptions.

The letters O.F. are prefixed to the names of the "Original Fellows" of the Society.

Elected

1884 ADAMS, THOMAS RUTHERFORD, M.D., Stamford House, 78, St. James's road, Croydon.

1879 ADDIS, PHILIP, L.R.C.P. Ed., Milton Lodge, Iver, Bucks.

1878 ALFORD, FREDERICK STEPHEN, 61, Haverstock hill, N.W.

1873 ALLEN, HENRY MARCUS, F.R.C.P. Ed., 20, Regency square, Brighton.

1878 ANDERSON, IZETT WILLIAM, M.D., 95, Duke street, Kingston, Jamaica. *Trans.* 1. *Hon. Loc. Sec.*

1875 ANDERSON, JOHN FORD, M.D., C.M., 28, Buckland crescent, Belsize park, N.W. *Council*, 1882.

1866 ANDREWS, HENRY CHARLES, M.D., 11, Addison terrace, Notting Hill, W. *Council*, 1882-3.

1859 ANDREWS, JAMES, M.D., Everleigh, Green hill, Hampstead, N.W. *Council*, 1881.

1884 APPLEFORD, STEPHEN HERBERT, L.R.C.P. Lond., 16, Finsbury circus, E.C.

1870 APPLETON, ROBERT CARLISLE, The Bar House, Beverley.

1884 APPLETON, THOMAS A., 46, Britannia road, Fulham, S.W.

Elected

1859 ARCHER, JOHN, F.R.C.S., 9, Carpenter road, Edgbaston, Birmingham.

1883 ARCHIBALD, JOHN, M.B., Lynton House, Brixton Rise, S.W.

1871 ARGLES, FRANK, L.R.C.P. Ed., Hermon Lodge, Wanstead, Essex, N.E. *Council*, 1886.

1861 ARMSTRONG, JOHN, M.D., Green street green, Dartford, Kent.

O.F. AVELING, JAMES H., M.D., Senior Physician to the Chelsea Hospital for Women; 1, Upper Wimpole Street, W. *Council*, 1865-66, 1872, 1884. *Hon. Sec.* 1878. *Hon. Lib.* 1874-6. *Vice-Pres.* 1877-8. *Chairman Midwifery Board*, 1878-83. *Trans.* 9.

1872 AYLING, ARTHUR H. W., 94A, Great Portland street, W.

1880 BAILEY, FRANCIS JAMES, 51, Grove Street, Liverpool.

1873 BAILEY, JAMES JOHNSON, M.D., F.R.C.S. Ed., Woodville Cottage, Marple, Cheshire.

1876 BAKER, JOHN PENNING, 6, York place, Portman square, W.

1880 BALLS-HEADLEY, WALTER, M.D., 186, Collins street east, Melbourne, Victoria.

1869 BANTOCK, GEORGE GRANVILLE, M.D., Surgeon to the Samaritan Free Hospital; 12, Granville place, Portman square, W. *Council*, 1874-6. *Trans.* 2.

O.F. BARNES, ROBERT, M.D., F.R.C.P., Consulting Obstetric Physician to St. George's Hospital; 15, Harley street, Cavendish square, W. *Vice-Pres.* 1859-60. *Council*, 1861-62, 1867. *Treas.* 1863-64. *Pres.* 1865-66. *Trans.* 32. *Trustee.*

1875 BARNES, R. S. FANCOURT, M.D., Physician to the British Lying-in Hospital; Assistant Obstetric Physician to the Great Northern Hospital; Physician to the Chelsea Hospital for Women; Physician to the Royal Maternity Charity; 7, Queen Anne street, Cavendish square, W. *Council*, 1879-81. *Trans.* 2.

1877 BARNES, THOMAS HENRY, M.D., 54, London road, Croydon.

1884 BARRACLOUGH, ROBERT W. S., M.D., 34, Dulwich road Herne hill, S.W.

Elected

1861* BARTRUM, JOHN S., F.R.C.S., Surgeon to the Bath General Hospital; 13, Gay street, Bath. *Council*, 1877-9. *Hon. Loc. Sec.*

1866 BASSETT, JOHN, M.D., Professor of Midwifery at the Queen's College, Birmingham; 144, Hockley Hill, Birmingham. *Council*, 1874-6. *Vice-Pres.* 1880-2. *Trans.* 3.

1885 BASTABLE, DANIEL HERBERT, L.K.Q.C.P.I., 47B, Welbeck street, W.

1873 BATE, GEORGE PADDOCK, M.D., 412, Bethnal Green road, E; and 2, Northumberland Houses, King Edward road, Hackney. *Council*, 1882-4.

1867 BATTEN, RAYNER W., M.D., Physician to the Gloucester General Infirmary; 1, Brunswick square, Gloucester. *Council*, 1886. *Hon. Loc. Sec.*

1871 BEACH, FLETCHER, M.B., Darenth Asylum, Dartford, Kent.

1871 BEADLES, ARTHUR, Park House, Dartmouth Park, Forest hill, S.E.

1885 BEATTY, WILLIAM JOHN, L.R.C.P.Ed., Stockton-on-Tees.

1866 BELCHER, HENRY, M.D., 12, Pavilion parade, Brighton.

1871 BELL, ROBERT, M.D. Glasg., 29, Lynedoch street, Glasgow.

1880 BENINGTON, ROBERT CREWDSON, 108, Denmark hill, S.E.

1873* BENNET, JAMES HENRY, M.D., The Ferns, Weybridge, and Mentone. *Council*, 1881-3. *Trans.* 1.

O.F. BERRY, SAMUEL, F.R.C.S., Consulting Surgeon-Accoucheur to the Queen's Hospital, and Professor of Midwifery and the Diseases of Women and Children in the Queen's College, Birmingham; Hatfield, Cavendish road, Clapham park, S.W. *Vice-Pres.* 1859. *Trans.* 1.

1883 BERTOLACCI, J. HEWETSON, Varden House, St. John's hill, New Wandsworth, S.W.

1879 BIGGS, J. M., Hillside, Child's hill, Hendon, N.W.

1868 BLACK, JAMES WATT, M.D., Obstetric Physician to the Charing Cross Hospital; 15, Clarges street, Piccadilly, W. *Council*, 1872-4. *Vice-Pres.* 1885-6.

1880 BLACK, ROBERT FRANCIS, L.R.C.P. Ed., Examiner in Midwifery, Trinidad Medical Board; 4, Chacon street, Port of Spain, Trinidad.

Elected

1861* Blake, Thomas William, Hurstbourne, Bournemouth Hants.

1872 Bland, George, Surgeon to the Macclesfield Infirmary; Park Green, Macclesfield.

1883 Bonney, William Augustus, M.D., 145, Beaufort street, Chelsea, S.W.

1872 Bosworth, John Routledge, Grove End, Sutton, Surrey.

1866 Boulton, Percy, M.D., Physician to the Samaritan Free Hospital; Obstetric Physician to Out-Patients, Queen Charlotte's Lying-in Hospital; 6, Seymour street, Portman square, W. *Council*, 1878-80, 1885. *Hon. Lib.* 1886. *Trans.* 3.

1885 Bourke, William Henry, L.K.Q.C.P.I., 8, Moreton gardens, South Kensington, S.W.

1877 Bowkett, Thomas Edward, 145, East India Road, Poplar, E.

1884 Boxall, Robert, M.D., 60, Gower street, W.C.

1885 Boyle, Thomas, Newquay, Cornwall.

1884 Boys, Arthur Henry, L.R.C.P. Ed., Lodway Villa, Pill, Bristol.

1877 Bradley, Michael McWilliams, M.B., Jarrow-on-Tyne.

1873 Braithwaite, James, M.D., Obstetric Physician to the Leeds General Infirmary; Lecturer on Diseases of Women and Children at the Leeds School of Medicine; 16, Clarendon road, Little Woodhouse, Leeds. *Vice-Pres.* 1877-9. *Trans.* 3. *Hon. Loc. Sec.*

1880 Branfoot, Arthur Mudge, M.B., Superintendent of the Government Lying-in Hospital, Madras, and Professor of Midwifery and Diseases of Women and Children in the Madras Medical College, Pantheon road, Madras. *Hon. Loc. Sec.*

1875 Brewer, Alexander Hampton, 201, Queen's road, Dalston, E. *Trans.* 1.

1862 Brickwell, John, Sawbridgeworth, Herts.

1872 Bridgwater, Thomas, M.B., Harrow-on-the-Hill, N.W. *Council*, 1884.

Elected

1864 BRIGHT, JOHN MEABURN, M.D., Alvaston, Park hill, Forest hill, S.E. *Council*, 1873-74.

1869 BRISBANE, JAMES, M.D., 21, Park road, Regent's park, N.W.

1885 BRISCOE, JOHN FREDERICK, Cancer Hospital, Brompton, S.W.

1866 BRODIE, GEORGE B., M.D., Consulting Physician-Accoucheur to Queen Charlotte's Lying-in Hospital; 3, Chesterfield street, Mayfair, W. *Council*, 1873-75.

1876 BROOKHOUSE, CHARLES TURING, M.D., 43, Manor road, Brockley, S.E.

1868 BROWN, ANDREW, M.D. St. And., 1, Bartholomew road, Kentish town, N.W. *Trans.* 1.

1865 BROWN, D. DYCE, M.D., 29, Seymour Street, Portman square, W.

1876 BRUNJES, MARTIN, 9, York street, Portman square, W.

1865 BRUNTON, JOHN, M.D., M.A., Surgeon to the Royal Maternity Charity; 21, Euston road, N.W. *Council*, 1871-3. *Vice-Pres.* 1882-4. *Trans.* 6.

O.F. BRYANT, WALTER JOHN, F.R.C.S., M.R.C.P. Ed., 23A, Sussex square, Hyde park gardens, W. *Council*, 1859.

1870 BUCK, JOSEPH RANDLE, L.R.C.P. Ed., 26, Sidbury, Worcester.

1883 BUKSH, RAHEEM, Poplar Hospital, East India road, E.

1882* BULLER, AUDLEY CECIL, M.D., Oxford and Cambridge Club, Pall Mall, S.W.

1878 BUNCOMBE, J. DOBREE, Victoria West, Cape Colony.

1885* BUNNY, J. BRICE, L.R.C.P. Ed., Newbury.

1877 BURCHELL, PETER LODWICK, M.B., Surgeon-Accoucheur to the City of London Lying-in Hospital; 2, Kingsland road, E. *Council*, 1882-4. *Vice.-Pres.* 1885-6. *Trans.* 1

1877 BURD, EDWARD, M.D., M.C., Senior Physician to the Salop Infirmary; Newport House, Shrewsbury. *Council*, 1886. *Hon. Loc. Sec.*

Elected

1878 BURN, STACEY SOUTHERDON, M.B. Oxon., Tudor Lodge, Richmond, Surrey.

1862 BURTON, JOHN MOULDEN, F.R.C.S., Lee Park Lodge, Lee, Kent, S.E. *Council*, 1868-69.

1878 BUTLER-SMYTHE, ALBERT CHARLES, M.R.C.P. Edin., 35, Brook street, Grosvenor square, W.

1868 BUTT, WILLIAM FREDERICK, L.R.C.P. Lond., 48, Park street, Grosvenor square, W. *Council*, 1876-78.

1883 CALDWELL, WILLIAM T. D., M.D., 284, Kennington park road, S.E.

1883 CAMERON, CHARLES HAMILTON HONE, L.R.C.P. Lond., Lochiel, Harlesden, Willesden, N.W.

1861 CANDLISH, HENRY, M.D., Physician to the Alnwick Infirmary; 26, Fenkle street, Alnwick, Northumberland.

1861 CANDY, JOHN, M.D., Brigade Surgeon, A.M.D., Retired, 5, Moira place, Southampton.

1863 CARLYLE, DAVID, M.D., 2, The Crescent, Carlisle. *Trans.* 1. *Hon. Loc. Sec.*

1872 CARTER, CHARLES HENRY, M.D., Physician to the Hospital for Women, Soho square; 45, Great Cumberland place, Hyde Park, W. *Council*, 1880-2. *Trans.* 4.

1877 CARVER, EUSTACE JOHN, Fairlawn, 635, Fulham road, S.W.

1869 CASKIE, JOHN BOYD, M.D., 19, Tyndale place, Islington, N.

1878 CASKIE, WILLIAM ALEX., M.A., M.B., Manse Court, 17, Main street, Largs, Ayrshire, N. B.

1863 CAYZER, THOMAS, Mayfield, Aigburth, Liverpool.

1875 CHAFFERS, EDWARD, F.R.C.S., 54, North street, Keighley, Yorkshire.

1873 CHALMERS, JOHN, M.D., 43, Caledonian road, N.

1876 CHAMPNEYS, FRANCIS HENRY, M.A., M.B. Oxon., F.R.C.P., Obstetric Physician to, and Lecturer on Midwifery at, St. George's Hospital, 60, Great Cumberland place, W. *Council*, 1880-1. *Hon. Lib.* 1882-3. *Hon. Sec.* 1884-6. *Trans.* 5.

Elected

1859 CHANCE, EDWARD JOHN, F.R.C.S., Surgeon to the Metropolitan Free Hospital and City Orthopædic Hospital; 59, Old Broad street, City, E.C.

1867* CHARLES, T. EDMONDSTOUNE, M.D., Cannes, France. *Council*, 1882-4.

1874 CHARLESWORTH, JAMES, 25, Birch terrace, Hanley, Staffordshire.

1868 CHILD, EDWIN, "Vernham," New Malden, Kingston-on-Thames, Surrey.

1883 CHILDS, CHRISTOPHER, M.A., M.B. Oxon., 2, Royal terrace, Weymouth. *Hon. Loc. Sec.*

1863* CHISHOLM, EDWIN, M.D., Abergeldie, Ashfield, near Sydney, New South Wales. [Per Messrs. Turner and Henderson, care of Messrs. W. Dawson, 121, Cannon street, E.C.].

1885 CHITTENDEN, THOMAS HILLIER, L.R.C.P. Lond., Whitwell, Welwyn.

1883 CLAPHAM, EDWARD, M.D., 29, Lingfield road, Wimbledon.

1859 CLAREMONT, CLAUDE CLARKE, Millbrook House, 1, Hampstead road, N.W.

1859 CLARK, JAMES FENN, Clent House, Beauchamp square, Leamington. *Hon. Loc. Soc.*

1879 CLARKE, REGINALD, South Lodge, Lee park, Lee, S.E.

1876 CLAY, GEORGE LANGSFORD, West View, 443, Moseley road, Highgate, Birmingham.

O.F. CLAY, JOHN, Professor of Midwifery, Queen's College, Birmingham; Allan House, Steelhouse lane, Birmingham. *Council*, 1868-69. *Vice-Pres.* 1872-4.

O.F. CLEVELAND, WILLIAM FREDERICK, M.D., Stuart villa, 199, Maida vale, W. *Council*, 1863-64. *Vice-Pres.* 1875-77. *Trans.* 1.

1881 CLOSE, JAMES ALEX, M.B., Summerfield, St. Clair Co., Illinois, U.S.

1865* COATES, CHARLES, M.D., Physician to the Bath General and Royal United Hospitals; 10, Circus, Bath.

Elected

1882 COATES, FREDERICK WILLIAM, M.D., St. John street, Salisbury.

1883 COATES, WILLIAM, 14, Bradshaw street, Moss side, Manchester.

1878 COCKELL, FREDERICK EDGAR, Jun., 176, Richmond road, Dalston, E.

1875 COFFIN, RICHARD JAS. MAITLAND, F.R.C.P. Ed., Alwington house, Baron's court, West Kensington, W.

1878 COFFIN, THOMAS WALKER, 79, Queen's crescent, Haverstock hill, N.W.

1875* COLE, RICHARD BEVERLY, M.D. Jefferson Coll. Philad., 218, Post street, San Francisco, California, U.S.

1884 COLLINS, WILLIAM JOB, M.D., B.S., B.Sc. Lond., F.R.C.S. Eng., 1, Albert terrace, Gloucester gate, N.W.

1877 COLMAN, WALTER TAWELL, Hon. Surgeon to the Brighton Hospital for Women; 87, Buckingham road, Brighton,

1885 COOK, PHILIP INKERMAN, M.D., Marmora House, Honor Oak, S.E.

1866 COOMBS, JAMES, M.D., Bedford.

1883 COONEY, JOHN EDWIN, L.R.C.P. Ed., 20 Vereker road, Baron's court, West Kensington, S.W.

1873 COOPER, FRANK W., Gainsborough house, Leytonstone, E.

1874 COOPER, HERBERT, L.R.C.P. Ed., Rosslyn hill, Hampstead, N.W.

1875* CORDES, AUG., M.D., Professor of Obstetrics at the University of Geneva; 12, Rue Bellot, Geneva. *Trans.* 1.

1883 CORNER, CURSHAM, 128, Mile End road, E.

1860 CORRY, THOMAS CHARLES STEUART, M.D., Senior Surgeon to the Belfast General Dispensary; Ormeau terrace, Belfast. *Council*, 1867. *Hon. Loc. Sec.*

1859 CORY, FREDERICK CHARLES, M.D., Portland villa, Buckhurst hill, Essex. *Council*, 1867-69. *Trans.* 1.

Elected

1875 CORY, ROBERT, M.D., Assistant Obstetric Physician to St. Thomas's Hospital; 73, Lambeth Palace road, S.E. *Council*, 1879-81, 1884-5. *Trans.* 1.

1869 COX, RICHARD, L.R.C.P. Ed., Theale, near Reading.

1877 CRAWFORD, JAMES, L.K.Q.C.P.I., Ightham, Sevenoaks.

1882 CREASE, JAMES ROBERTSON, F.R.C.S. Ed., 2, Ogle Terrace, South Shields.

1881 CREASY, JAMES GIDEON, Brasted, Sevenoaks, Kent.

1883 CREMEN, PATRICK JOHN, M.D., 4, Camden place, Cork.

1876 CREW, JOHN, Higham Ferrers, Northamptonshire.

1881 CRONK, HERBERT GEORGE, M.B. Cantab., Repton, near Burton-on-Trent.

1869 CROSS, ROBERT SHACKLEFORD, Petersfield, Hants.

1875* CULLINGWORTH, CHARLES JAMES, M.D., M.R.C.P., Physician to St. Mary's Hospital, Manchester; Professor of Obstetrics in the Medical Department of the Owens College, Manchester; 260, Oxford road, Manchester. *Council*, 1883-5. *Vice-Pres.* 1886. *Trans.* 2.

1862 CUMBERBATCH, LAWRENCE TRENT, M.D., 25, Cadogan place, Belgrave square, S.W. *Council*, 1868-70. *Vice-Pres.* 1878.

1859 CURGENVEN, J. BRENDON, 11, Craven hill gardens, Bayswater, W. *Council*, 1870-72. *Trans.* 3.

1885 DAKIN, W. RADFORD, M.D., 61, Edith road, West Kensington, W.

1868 DALY, FREDERICK HENRY, M.D., 185, Amhurst road, Hackney Downs, N.E. *Council*, 1877-9. *Vice-Pres.* 1883-5. *Trans.* 2.

1882 DAMBRILL-DAVIES, WILLIAM R., 101, Piccadilly, Manchester; and Chelford, Cheshire.

1884 DARWIN, GEORGE HENRY, M.R.C.P., The Cedars, Albert park, Didsbury, near Manchester.

1883 DAVIDSON, CHARLES, M.D. St. And., 29, Cassland road, Hackney, E.

1876 DAVIES, GOMER, L.R.C.P. Ed., 9, Pembridge villas, Bayswater, W.

Elected

1884 DAVIES, JOHN, 91, New North road, N.

1885 DAVIES, WILLIAM MORRISTON, M.D., 55, Gordon square, W.C.

1877 DAVSON, SMITH HOUSTON, M.D., Campden villa, 203, Maida vale, W.

1878 DAY, EDMUND OVERMAN, Assistant Surgeon to the Royal Infirmary for Children and Women, Waterloo Bridge road; 78, Waterloo road, S.E.

1880 DAY, WILLIAM HANKES, Surgeon to the City Prisons, Norwich; 3, Surrey Street, Norwich. *Trans.* 1.

1859 DAY, WILLIAM HENRY, M.D., Physician to the Samaritan Free Hospital for Women and Children; 10, Manchester square, W. *Council*, 1873-75. *Vice-Pres.* 1885-6.

1877 DEWAR, JOHN, L.R.C.P. Ed., 132, Sloane street, S.W.

1860 DICKENSON, JOHN, F.R.C.S., Hon. Surgeon to the Wrexham Infirmary; Wrexham, Denbighshire.

1885 D'MONTE, DOMINICK A., M.D., Northbrook Indian Club, 3, Whitehall gardens, S.W.

1879 DOLAN, THOMAS MICHAEL, M.D., Horton house, Halifax.

1879 DORAN, ALBAN H. G., F.R.C.S., Surgeon to Out-Patients, Samaritan Free Hospital; 9, Granville place, Portman square, W. *Council*, 1883-5. *Trans.* 5.

1880 DOWNES, DENIS SIDNEY, L.K.Q.C.P.I., 55, Kentish town road, N.W.

1884 DOYLE, E. A. GAYNES, L.R.C.P., Colonial Hospital, Port of Spain, Trinidad.

O.F. DRAGE, CHARLES, M.D., Hatfield, Herts. *Council*, 1861-4. *Trans.* 1.

1885 DRAGE, LOVELL, St. Bartholomew's Hospital, E.C.

1871 DRAKE-BROCKMAN, EDWARD FORSTER, F.R.C.S., L.R.C.P. Lond., Surgeon-Major; Superintendent Eye Infirmary, Madras; Professor of Physiology and Ophthalmology, Madras Medical College. [*Per* Messrs. Richardson and Co., East India Army Agency, 13, Pall Mall, S.W.]

1884 DRAKE, CHARLES HENRY, Brixton hill, S.W.

Elected

1878 Dring, William Ernest, L.R.C.P. Ed., Buckhurst hill, Essex.

1884 Duke, John C., The Glen, Lewisham, S.E.

1883 Duncan, Alexander George, M.B., 25, Amhurst park, Stamford hill, N.E.

O.F. Duncan, James, M.B., 8, Henrietta street, Covent garden, W.C. *Council*, 1873-74.

1882 Duncan, William A., M.D., Assistant Obstetric Physician to the Middlesex Hospital; Obstetric Physician to the Royal Hospital for Women and Children; 6, Harley street, W. *Council*, 1885-6. *Trans.* 1.

1882 Dutt, Upendra Krishna, L.R.C.P. Ed., 20, Beadon street, Calcutta.

1882 Eady, George John, M.D., Roslin, Caterham Valley.

1871 Eastes, George, M.B., F.R.C.S., 69, Connaught street, Hyde park square, W. *Council*, 1878-80.

1883 Eccles, F. Richard, M.D., Examiner for the College of Physicians and Surgeons, Ontario; Professor of Physiology, Western University; 1, Ellwood place, Queen's avenue, London, Ontario, Canada.

1867 Edis, Arthur W., M.D., Obstetric Physician to, and Lecturer on Midwifery at, the Middlesex Hospital; Physician to the Chelsea Hospital for Women; 22, Wimpole street, W. *Council*, 1873-74. *Hon. Sec.* 1874-77. *Vice-Pres.* 1878-80. *Trans.* 8.

1879 Elder, George, M.D., C.M., Surgeon to the Samaritan Hospital for Women, Nottingham; 17, Regent street, Nottingham. *Hon. Loc. Sec.*

1879 Elkington, Arthur Guy, Surgeon-Major, Grenadier Guards, 52, Gillingham street, Eccleston square, S.W. *Council*, 1886.

1878 Ellery, Richard, L.R.C.P. Ed., Plympton, Devon.

1873 Engelmann, George Julius, A.M., M.D., 3003, Locust street, St. Louis, Missouri, U.S.

1884 English, Thomas Johnston, M.D., 128, Fulham road, S.W.

Elected

1875 EWART, JOHN HENRY, Eastney, Devonshire place, Eastbourne.

1875 EYELEY, JOSEPH FREDERICK, L.R.C.P. Lond., 5, Hill-park crescent, Plymouth. *Hon. Loc. Sec.*

1884 EYRE, JOHN J., L.K.Q.C.P., Vega House, Forest Hill, S.E.

1876 FARNCOMBE, RICHARD, 40, Belgrave street, Balsall heath, Birmingham.

1869 FARQUHAR, WILLIAM, M.D., Surgeon-Major, Madras Army, Ootacamund, Madras Presidency. [*Per* W. Farquhar, 3, Powis square, W.]

1861 FARR, GEO. F., L.R.C.P. Ed., Slade House, 175, Kennington road, S.E. *Council*, 1885.

1882 FARRAR, JOSEPH, M.D., 8, Queen's terrace, Morecambe.

1881 FARRER, GEORGE ALBERT, Spring villa, Brighouse, Halifax.

1879 FAYRER, SIR JOSEPH, M.D., K.C.S.I., Hon. Physician to H.M. the Queen and to H.R.H. the Prince of Wales; Physician to H.R.H. the Duke of Edinburgh; President Medical Board, India Office, &c.; 53, Wimpole street, Cavendish square. *Council*, 1883.

1868 FEGAN, RICHARD, M.D., Westcombe park, Blackheath, S.E.

1870 FISHER, JOHN MOORE, M.D., 6, Pryme street, Hull.

1882 FITZGERALD, CHARLES EGERTON, M.D., West Terrace, Folkestone.

1884 FITZGERALD, JAMES G., Arundel Lodge, Balham, S.W.

1878 FLINT, ARTHUR, L.R.C.P., Westgate-on-Sea, Isle of Thanet.

1877* FONMARTIN, HENRY DE, M.D., The Elms, Parkhurst, Isle of Wight.

1884 FORD, ALEXANDER, L.R.C.P. Ed., Newtown park, Waterford.

1877* FORD, JAMES, M.D., Eltham, Kent.

1884 FORSTER, HARRY JOHN, 420, Old Kent road, S.E.

1884 FORSYTH, ALEXANDER, M.D., 12, Park place, Greenwich, S.E.

1884 FOURACRE, ROBERT PERRIMAN, 20, Tollington park, N.

Elected

1865 FOWLER, JAMES, F.S.A., Hon. Surgeon to the Clayton Hospital and Wakefield General Dispensary; 13, South Parade, Wakefield. *Council*, 1872-4. *Hon. Loc. Sec.*

1862 FRAIN, JOSEPH, M.D., Hon. Surgeon to the South Shields Dispensary; Frederick street, South Shields.

1875* FRASER, ANGUS, M.D., Physician and Lecturer on Clinical Medicine to the Aberdeen Royal Infirmary; 232, Union street, Aberdeen.

1867 FREEMAN, HENRY W., 24, Circus, Bath.

1880 FRY, JOHN BLOUNT, Swindon, Wiltshire.

1883 FULLER, HENRY ROXBURGH, M.A. Cantab., 45, Curzon street, Mayfair, W. *Trans.* 1.

1874* GALABIN, ALFRED LEWIS, M.A., M.D., Obstetric Physician to, and Lecturer on Midwifery at, Guy's Hospital; 49, Wimpole street, Cavendish square, W. *Council*, 1876-78. *Hon. Lib.* 1879. *Hon. Sec.* 1880-3. *Vice-Pres.* 1884. *Treas.* 1885-6. *Trans.* 11.

1863 GALTON, JOHN H., M.D., Woodside, 39, Anerley road, Upper Norwood, S.E. *Council*, 1874-6.

1881 GANDY, WILLIAM, Hill Top, Gipsy hill, S.E.

1879 GARDNER, JOHN TWINAME, 6, Hillsboro' terrace, Ilfracombe.

1872 GARDNER, WILLIAM, M.A., M.D., Professor of Gynæcology, McGill University; Gynæcologist to the Montreal General Hospital; 109, Union avenue, Montreal, Canada.

1863 GARMAN, HENRY VINCENT, Kent House, 6, Bow road, E.

1876 GARNER, JOHN, 52, New Hall street, Birmingham.

1873 GARTON, WILLIAM, M.D., F.R.C.S., Hardshaw street, St. Helen's, Lancashire.

1875 GAWITH, J. JACKSON, 23, Westbourne park terrace, W.

1859 GERVIS, HENRY, M.D., F.R.C.P., Obstetric Physician to, and Lecturer upon Obstetric Medicine at, St. Thomas's Hospital; 40, Harley street, Cavendish square. *Council*, 1864-66. *Hon. Sec.* 1867-70. *Vice-Pres.* 1871-3. *Treas.* 1878-81. *Pres.* 1883-4. *Trans.* 8.

Elected

1866 GERVIS, FREDERICK HEUDEBOURCK, 1, Fellows road, Haverstock hill, N.W. *Council*, 1877-9. *Trans.* 1.

1884 GIBB, CHARLES JOHN, M.D., Westgate House, Newcastle-on-Tyne.

1875 GIBBINGS, ALFRED THOMAS, M.D., 93, Richmond road, Dalston, N.E. *Council*, 1885-6.

1884 GIBBON, FREDERICK WILLIAM, 87, Hudson street, South Shields.

1883 GIBBONS, ROBERT ALEXANDER, M.D., Physician to the Grosvenor Hospital for Women and Children; 32, Cadogan place, S.W.

1874 GIBSON, JAMES EDWARD, Hillside, West Cowes, Isle of Wight.

1866 GIDDINGS, WILLIAM KITTO, L.R.C.P. Ed., Shaftesbury House, Calverley, near Leeds, Yorkshire.

1877 GIFFARD, DOUGLAS WILLIAM, 5, Pavilion Parade, Old Steyne, Brighton.

1869 GILL, WILLIAM, L.R.C.P. Lond., 11, Russell square, W.C.

1867 GITTINS, JOHN, L.R.C.P. Ed., St. John's, Horselydown, S.E.

1871 GODDARD, EUGENE, L.R.C.P. Lond., North Lynne, Highbury New Park, N. *Trans.* 1.

1876 GODFRAY, ALFRED CHARLES, M.B., St. Helier House, Jersey.

1871 GODSON, CLEMENT, M.D., C.M., Consulting Physician to the City of London Lying-in Hospital; Assistant Physician-Accoucheur to St. Bartholomew's Hospital; 9, Grosvenor street, W. *Council*, 1876-77. *Hon. Sec.* 1878-81. *Vice-Pres.* 1882-4. *Trans.* 5.

1868 GODWIN, ASHTON, M.D., 28, Brompton crescent, Brompton, S.W.

1873 GOLDSMITH, JOHN, M.D., Highworth House, Worthing, Sussex.

1873 GOODCHILD, NATHANIEL, L.R.C.P. Ed., 9, Highgate road, N.W.

1883 GORDON, JOHN, M.D., 10, Amersham road, New Cross, S.E.

1869 GOSS, TREGENNA BIDDULPH, 1, The Circus, Bath.

Elected

1884 GOWANS, WILLIAM, F.R.C.S. Ed., 1, Victoria terrace, South Shields.

1885 GRANT, OGILVIE, M.D., Queen Mary's House, Inverness.

1875 GRAY, JAMES, M.D., 15, Newton terrace, Glasgow.

1884 GREENE, WALTER, L.R.C.P. Lond., Wallingford.

1874 GREENE, WILLIAM THOMAS, M.D., Moira House, Peckham rye, S.E. *Council*, 1880. *Trans.* 1.

1863 GRIFFITH, G. DE GORREQUER, Lecturer on Diseases of Women and Children at the Zenana and Medical Mission Training School for Ladies; 34, St. George's square, S.W. *Trans.* 2.

1869 GRIFFITH, JOHN T., M.D., Talfourd House, Camberwell, S.E. *Council*, 1884-6.

1879 GRIFFITH WALTER SPENCER ANDERSON, M.B. Cantab., F.R.C.S., M.R.C.P., Tutor in Obstetrics and Gynæcology at St. Bartholomew's Hospital; 114, Harley street, W. *Council*, 1886. *Trans.* 2.

1880 GRIFFITHS, GRIFFITH, Bryncelyn, Pontardawe, Swansea Valley.

1870 GRIGG, WILLIAM CHAPMAN, M.D., Physician to the Inpatients, Queen Charlotte's Lying-in Hospital; Assistant Obstetric Physician to the Westminster Hospital; Assistant-Physician to the Victoria Hospital for Children; 6, Curzon street, Mayfair. *Council*, 1875-77.

O.F. GRIMSDALE, THOS. F., L.R.C.P. Ed., Consulting Surgeon to the Lying-in Hospital, and late Lecturer on Diseases of Children, &c., at the Royal Infirmary School of Medicine; 29, Rodney street, Liverpool. *Council*, 1861-62. *Vice-Pres.* 1875-76.

1882 GRIPPER, WALTER, M.B. Cantab., Featherstone villa, Wallington, Surrey.

1880 GROGONO, WALTER ATKINS, Berwick House, Broadway, Stratford, E.

1876 GROTH, ERNST R. G., M.D., 5, Weymouth street, Portland place, W.

1879 GROVE, WILLIAM RICHARD, M.D., St. Ives, Huntingdonshire.

Elected

1885 GRÜN, EDWARD FERDINAND, 2, Lower Richmond road, Putney, S.W.

1867 HADAWAY, JAMES, L.R.C.P. Ed., Dent-de-Lion Villa, Garlinge, near Margate.

1876 HADDEN, JOHN, M.D., 31, West street, Horncastle, Lincolnshire.

1881 HAIR, JAMES, M.D., Westgate, Peterborough.

1859 HALL, FREDERICK, 1, Jermyn street, St. James's, S.W.

1871 HALLOWES, FREDERICK B., Redhill, Reigate, Surrey. *Council*, 1885-6.

1880 HAMES, GEORGE HENRY, F.R.C.S., 2, Queensborough terrace, W.

1880 HAMILTON, THOMAS, M.D., Melrose House, 129, Green lanes, Stoke Newington, N.

1860 HARDEY, KEY, Surgeon to the West City Dispensary; 4, Wardrobe place, Doctors' Commons, E.C.

1877 HARPER, GERALD S., 5, Hertford street, May Fair, W.

1878 HARRIES, THOMAS DAVIES, F.R.C.S., Grosvenor House, Aberystwith, Cardiganshire.

O.F. HARRINSON, ISAAC, F.R.C.S., Castle street, Reading, Berks. *Council*, 1862-65. *Hon. Loc. Sec.*

1862 HARRIS, CHARLES, M.D., Northiam, Ashford, Kent.

1872 HARRIS, HENRY, M.D., F.R.C.S., Trengweath place, Redruth Cornwall.

1867 HARRIS, WILLIAM H., M.D., late Professor of Midwifery in the Madras Medical College, and Superintendent of the Lying-in Hospital, Madras; 78, Oxford gardens, W.

1861 HARRIS, WILLIAM JOHN, 26, Marine Parade, Worthing. *Hon. Loc. Sec.*

1880 HARRISON, RICHARD CHARLTON, 13, Sandringham gardens, Ealing, W.

1879 HARVEY, GEORGE, L.R.C.P. Ed., Wirksworth, Derbyshire.

1880 HARVEY, JOHN STEPHENSON, 69, Rue Faidherbe, Boulogne-sur-Mer, France.

Elected

1865 HARVEY, ROBERT, M.D., 52, Chowringhee, Calcutta. [Per Messrs. Cochran and Macpherson, 152, Union street, Aberdeen.] *Trans.* 1. *Hon. Loc. Sec.*

1865 HAYES, HAWKESLEY ROCHE, Basingstoke, Hants.

1873 HAYES, THOMAS CRAWFORD, M.D., Assistant Obstetric Physician to King's College Hospital; 17, Clarges street, Piccadilly, W. *Council*, 1876-78.

1880 HEATH, WILLIAM LENTON, M.B., 88A, Cromwell road, Queen's gate, S.W. *Trans.* 1.

1867 HEMBROUGH, JOHN WILLIAM, Ivy cottage, Waltham, Grimsby.

1881 HEPBURN, WILLIAM ALEX., Rosslyn House, Coxhoe, Co. Durham.

1876 HERMAN, GEORGE ERNEST, M.B., F.R.C.P., Obstetric Physician to, and Lecturer on Midwifery at, the London Hospital; 7, West street, Finsbury circus, E.C. *Council*, 1878-79. *Hon. Lib.* 1880-1. *Hon. Sec.* 1882-5. *Vice-Pres.* 1886. *Trans.* 6.

O.F. HEWITT, GRAILY, M.D., F.R.C.P., Professor of Midwifery in University College, London, and Obstetric Physician to University College Hospital; 36, Berkeley square, W. *Hon. Sec.* 1859-64. *Treas.* 1865-66. *Vice-Pres.* 1867-68. *Pres.* 1869-70. *Trans.* 21.

1860 HICKS, JOHN BRAXTON, M.D., F.R.C.P., F.R.S., Consulting Obstetric Physician to Guy's Hospital; 24, George street, Hanover square. *Council*, 1861-2, 1869. *Hon. Sec.* 1863-65. *Vice-Pres.* 1866-68. *Treas.* 1870. *Pres.* 1871-2. *Trans.* 36.

1860 HIGGS, THOMAS FREDERIC, M.D., Beaconsfield House, Dudley, Worcestershire.

1879 HILL, T. WOOD, L.R.C.P. Ed., 96, Earl's court road, W.

O.F. HODGES, RICHARD, M.D., F.R.C.S., 36, Harewood Square, N.W. *Trans.* 3.

1864 HOFFMEISTER, Sir WILLIAM CARTER, M.D., Surgeon to the Queen in the Isle of Wight; Clifton House, Cowes, Isle of Wight. *Council*, 1877-9.

Elected

1875 Hollings, Edwin, M.D., 4, Gordon street, Gordon square, W.C.

1859 Holman, Constantine, M.D., The Barons, Reigate, Surrey. *Council*, 1867-69. *Vice-Pres.* 1870-71.

1880 Honiball, Oscar Dunscombe, M.D., Demerara, British Guiana.

1864 Hood, Wharton Peter, M.D., 65, Upper Berkeley street, Portman square, W.

1872 Hope, William, M.D., Physician to Queen Charlotte's Lying-in Hospital; 56, Curzon street, Mayfair, W. *Council*, 1877-9.

1884 Hopkins, John, L.R.C.P. Ed., 93, Camberwell road, S.E.

1883* Horrocks, Peter, M.D., M.R.C.P. Lond., Assistant Obstetric Physician to, and Demonstrator of Practical Obstetrics at, Guy's Hospital; 9, St. Thomas's street, S.E. *Council*, 1886. *Trans.* 1.

1876 Horsman, Godfrey Charles, 22, King street, Portman square, W.

1883 Hoskin, Theophilus, L.R.C.P. Lond., 186, Amhurst road, N.E.

1883 Houghin, Edmund King, L.R.C.P. Ed., 23, High street, Stepney, E.

1884 Hough, Charles Henry, Full street, Derby.

1877 Howell, Horace Sydney, M.D., East Grove house, 18, Boundary road, St. John's Wood, N.W.

1879 Hubbard, Thomas Wells, Lenham, Bromley, Kent.

1885 Hughes, Edgar A., L.R.C.P. Lond., 91, Onslow gardens, S.W.

1882 Hunt, Joseph William, M.D. B.S., 101, Queen's road, Dalston, E.

1883 Hurford, Charles, L.R.C.S.I., 258, Caledonian road, N.

1884* Hurry, Jamieson Boyd, M.D. Cantab., 43, Castle street, Reading. *Trans.* 1.

1878 Husband, Walter Edward, 56, Bury New Road, Manchester.

Elected

1859 HUTCHINSON, JONATHAN, F.R.C.S., F.R.S., Consulting Surgeon to the London Hospital; 15, Cavendish square, W. *Council*, 1869-71. *Vice-Pres.* 1881-3. *Trans.* 1.

1882 HUTTON, ROBERT JAMES, L.R.C.P. Ed., Stapleton House, Stapleton Hall road, Finsbury Park, N.

1877 ILOTT, JAMES JOHN, L.R.C.P. Ed., Resident Medical Officer, Whitechapel Union Infirmary, Baker's row, E.

1884 INGLE, ROBERT NICHOLS, M.D., University Lecturer on Midwifery, 21, Regent street, Cambridge.

1884 INGLIS, JAMES, King street, Newcastle, New South Wales.

1879 INKSON, JAMES, M.D., Brigade-Surgeon, Army Medical Department, General Hospital, Calcutta.

1883 INMAN, ROBERT EDWARD, 243, Hackney road, E.

1884 IRWIN, JOHN ARTHUR, M.A., M.D., 363, Fifth avenue, New York.

1864 JACKSON, EDWARD, M.B., 69, Osborne Road, Jesmond, Newcastle-on-Tyne.

1883 JACKSON, GEORGE HENRY, Lansdowne House, Tottenham.

1884 JACKSON, JAMES, 14, Huntingdon street, Barnsbury, N.

1864 JACKSON, ROBERT, M.D., 53, Notting hill square, W. *Council*, 1885.

1883 JAKINS, PERCY S., 9, Osnaburgh street, Regent's park, N.W.

1873 JAKINS, WILLIAM VOSPER, L.R.C.P. Ed., Sturt street, Ballarat, Victoria.

1872 JALLAND, ROBERT, Horncastle, Lincolnshire. *Trans.* 1.

1878 JAMES, WALTER CULVER, M.D., M.C., 11, Marloes road, Kensington, W.

1877 JAMIESON, PATRICK, M.A., 3, St. Peter's street, Peterhead, Aberdeenshire.

1885 JAMIESON, ROBERT ALEXANDER, M.D., Shanghai. [Per Messrs. Henry S. King and Co., 65, Cornhill, E.C.]

1883* JENKINS, EDWARD JOHNSTONE, M.B. Oxon., Australian Club, Sydney (per H. K. LEWIS, 136, Gower street, W. C.).

Elected

1877 JENKS, EDWARD W., M.D., 84, Lafayette avenue, Detroit, Michigan, U.S.

1882 JENNINGS, CHARLES EGERTON, F.R.C.S. Eng., Assistant Surgeon to the North-West London Hospital; 75, Park street, Grosvenor square, W.

1883 JOHNSON, ARTHUR JUKES, M.B., Bloor street west, Toronto, Ontario, Canada.

1877 JOHNSON, SAMUEL, M.D., 5, Hill street, Stoke-upon-Trent.

1881 JOHNSTON, JOSEPH, M.D., 24, St. John's Wood Park, N.W.

1879 JOHNSTON, WM. BEECH, M.D., 157, Jamaica road, Bermondsey, S.E.

1868 JONES, EVAN, Ty-Mawr, Aberdare, Glamorganshire. *Council*, 1886. *Hon. Loc. Sec.*

1878 JONES, H. MACNAUGHTON, M.D., F.R.C.S.I. and Edin., Examiner in Obstetrics, Royal University of Ireland; Professor of Obstetrics, Queen's College, Cork; 141, Harley street, Cavendish square, W.

1881 JONES, JAMES ROBERT, M.B., Box, 320, Winnipeg, Manitoba, Canada.

1868 JONES, JOHN, 60, King street, Regent street, W.

1874 JONES, JOHN THOMAS, L.K.Q.C.P. I., 179, Brixton road, S.W.

1876 JONES, LESLIE, M.D., C.M., Limefield House, Cheetham Hill, Manchester.

1883 JONES, MONTAGU HANDFIELD, M.B. Lond., M.R.C.P. Lond., Joint Lecturer on Midwifery at, and Physician Accoucheur in Charge of Out-patients to, St. Mary's Hospital; 24, Montagu square, W.

1873 JONES, PHILIP W., Silver street, Enfield.

1883 JONES, W. H. FENTON, M.D., 29, Brook street, Grosvenor square, W.

1885 JONES, P. SYDNEY, M.D., 16, College street, Hyde Park, Sydney. (Per Messrs. D. Jones & Co., 1, Gresham Buildings, Basinghall street, E.C.)

Elected

1879 JOUBERT, CHARLES HENRY, M.D., Darjeeling, Bengal; [care of Messrs. Gray and Co., 21, Canning street, Calcutta].

1878 JUDSON, THOMAS ROBERT, L.R.C.P. Lond., Hayman's Green, West Derby, Liverpool.

1875 JUKES, AUGUSTUS, M.B., N. W. Mounted Police, Regina, N. W. Territory, Canada.

1878 KANE, NATHANIEL H. K., M.D., Lanherne, Kingston hill, Surrey.

1884 KEATES, WILLIAM COOPER, L.R.C.P., 2, Tredegar villas, East Dulwich road, S.E.

1880 KEBBELL, ALFRED, Flaxton, York.

O.F. KEELE, GEORGE THOMAS, 81, St. Paul's road, Highbury, N. *Council*, 1885.

1883 KEELING, JAMES HURD, M.D., 267, Glossop road, Sheffield. *Hon. Loc. Sec.*

1874 KEMPSTER, WILLIAM HENRY, L.R.C.P. Ed., Oak House, Bridge road, Battersea, S.W.

1879 KER, HUGH RICHARD, L.R.C.P. Ed., Townsend House, Hales-Owen.

1865* KERNOT, GEORGE CHARLES, 9, Elphinstone road, Hastings,

1883 KERR, J. KING, M.D., Leytonstone, E.

1872 KERR, NORMAN S., M.D., F.L.S., 42, Grove road, Regent's park, N.W.

1877* KERSWILL, JOHN BEDFORD, M.R.C.P. Ed., Fairfield, St. German's, Cornwall.

1878 KHORY, RUSTONJEE NASERWANJEE, M.D. Brussels, L.Med. Bombay, Physician to the Parell Dispensary, Bombay, Lecturer to Native Midwives, Grant Medical College, Bombay; Girgaum road, Bombay.

O.F. KJALLMARK, HENRY WALTER, 5, Pembridge gardens, Bayswater. *Council*, 1879-80.

1860 KINGSFORD, EDWARD, F.R.C.S., Surgeon to the Sunbury Dispensary; Sunbury-on-Thames.

Elected

1862 KIRKPATRICK, JOHN RUTHERFORD, M.D. Dub., King's Professor of Midwifery, Dublin University; 4, Upper Merrion street, Dublin. *Council*, 1872-4.

1872* KISCH, ALBERT, 3, Sutherland gardens, Maida vale, W.

1867 KNAGGS, HENRY GUARD, M.D., 189, Camden road, N.W.

1884 KNAPTON, GEORGE, L.R.C.P. Ed., Portswood, Southampton.

1876 KNOTT, CHARLES, M.R.C.P. Ed., Liz Ville, Elm grove, Southsea.

1881 LACY, CHARLES SETHWARD DE LACY, M.B., 31, Grosvenor street, W.

1885 LANE, JAMES OSWALD, B.A., M.D. Cantab., Northampton.

1867 LANGFORD, CHARLES P., 29, Duncan terrace, Islington, N.

1883 LANGLEY, AARON, L.R.C.P. Ed., 149, Walworth road, S.E.

1872 LATTEY, JAMES, 23, St. Mary Abbott's terrace, Kensington, W.

1875 LAWRENCE, ALFRED EDWARD AUST, M.D., Physician-Accoucheur to the Bristol General Hospital; 15, Richmond hill, Clifton, Bristol. *Council*, 1885-86.

1878 LEACHMAN, ALBERT WARREN, M.D., Fairley, Petersfield, Hants.

1884 LEADAM, WILLIAM WARD, M.D., 80, Gloucester terrace, Hyde park, W.

1884 LEDIARD, HENRY AMBROSE, M.D., 43, Lowther street, Carlisle. *Trans.* 1.

1860 LEISHMAN, WILLIAM, M.D., Physician to the University Lying-in Hospital, Regius Professor of Midwifery in the University of Glasgow; 11, Woodside crescent, Glasgow. *Council*, 1866-68. *Vice-Pres.* 1869-70. *Trans.* 1.

1882 LEONARD, HENRY JAMES, M.B., 279, Camden road, N.W.

1881 LE PAGE, JOHN FISHER, L.R.C.P. Ed., 17, The Crescent, Salford, Manchester.

1885 LEWERS, ARTHUR H. N., M.D. Lond., M.R.C.P., Assistant Obstetric Physician to the London Hospital; 60, Wimpole street, W.

Elected

1877 LEWIS, JOHN RIGGS MILLER, M.D., Deputy-Surgeon General, Woodlands, Queen's road, Norbiton, S.W.

1885 LIDIARD, SYDNEY ROBERT, L.R.C.P. Ed., 11, Charlotte street, Hull.

1875 LIEBMAN, CARLO, M.D. Vienna, Principal Surgeon, Trieste Civil Hospital, Trieste, Austria. *Trans.* 1.

1874 LITHGOW, ROBERT ALEXANDER DOUGLAS, M.R.C.P. Ed., 27A, Lowndes street, Belgrave square, S.W.

1868 LLEWELLYN, EVAN, L.R.C.P. Ed., 9, Mount place, London Hospital, E.

1872* LOCK, JOHN GRIFFITH, M.A., Lansdowne House, Tenby.

1859 LOMBE, THOMAS ROBERT, M.D., Bemerton, Torquay.

1870 LONG, MARK, M.D., Ludlow, Salop.

1876 LOVETT, HENRY ALBERT, Swansea, Tasmania. [Per S. W. Lovett, St. Stephen's street, Norwich.]

1862 LOWE, GEORGE, F.R.C.S., 5, Horninglow street, Burton-on-Trent, Staffordshire. *Trans.* 1.

1873 LUSH, WILLIAM JOHN HENRY, F.R.C.P.Ed., Associate of King's College, London; Fyfield House, Andover.

1878* LYCETT, JOHN ALLAN, M.D., The "Hollies," Graiseley, Wolverhampton.

1871 MCCALLUM, DUNCAN CAMPBELL, M.D., Professor of Midwifery and Diseases of Women and Children, McGill University; Physician to the University Lying-in Hospital; and Physician to the Montreal General Hospital; 45, Union avenue, Montreal, Canada. *Trans.* 4.

1884 MCCARTHY, GEORGE FRANCIS, L.K.Q.C.P., 138, Westminster Bridge road, S.E.

1879 MACKEOUGH, GEORGE J., M.D., Chatham, Ontario, Canada.

O.F. MACKINDER, DRAPER, M.D., Consulting-Surgeon to the Gainsborough Dispensary; Gainsborough, Lincolnshire. *Council*, 1871-3. *Trans.* 2.

1879 MACLAURIN, HENRY NORMAND, M.D., 155, Macquarie street, Sydney, New South Wales.

Elected

1859 MADGE, HENRY M., M.D., 4, Upper Wimpole street, W. *Council*, 1863-65, 1884. *Vice-Pres.* 1872-4. *Trans.* 15.

1884 MALCOLM, JOHN D., M.B., C.M., 24, Bryanston street, W.

1871 MALINS, EDWARD, M.D., Obstetric Physician to the General Hospital, Birmingham; 8, Old square, Birmingham. *Council*, 1881-3. *Vice-Pres.* 1884-6.

1876 MANBY, FREDERICK EDWARD, 10, King street, Wolverhampton.

1868 MARCH, HENRY COLLEY, M.D., 2, West street, Rochdale.

1860 MARLEY, HENRY FREDERICK, The Nook, Padstow, Cornwall.

1862 MARRIOTT, ROBERT BUCHANAN, Swaffham, Norfolk.

1873 MARTIN, HENRY CHARRINGTON, M.B., C.M., 11, Somers place, Hyde park, W.

1877 MASON, SAMUEL BUTLER, L.R.C.P. Ed., Denham House, Pontypool, Monmouthshire.

1884 MASSEY, HUGH HOLLAND, 2, North terrace, Camberwell, S.E.

1884 MASTERS, JOHN ALFRED, L.R.C.P. Lond., Westall House, Brook green, W.

1877 MAUNSELL, H. WIDENHAM, A.M., M.D., Pitt and London street, Dunedin, New Zealand.

1883 MAURICE, OLIVER CALLEY, 75, London street, Reading.

1877 MAY, LEWIS JAMES, Bountis Thorne, Seven Sisters road, Finsbury Park, N.

1884 MAYNARD, EDWARD CHARLES, L.R.C.P. Ed., 32, Sandgate road, Folkestone.

1885 MELLER, CHARLES BOOTH, L.R.C.P. Ed., Cowbridge, Glamorganshire.

1882 MEREDITH, WILLIAM APPLETON, M.B., C.M., Surgeon to the Samaritan Free Hospital for Women and Children; 6, Queen Anne street, Cavendish square, W. *Council*, 1886.

1883 MIDDLEMIST, ROBERT PERCY, L.R.C.P. Lond., 10, Bedford place, Russell square W.C.

Elected

1875 *Miles, Abijah J., M.D., Professor of Diseases of Women and Children in the Cincinnati College of Medicine, Cincinnati, Ohio, U.S.

1871 Miller, Hugh, M.D., Physician-Accoucheur to the Glasgow Maternity Hospital; 298, Bath crescent, Bath street, Glasgow.

1876 Millman, Thomas, M.D., Asylum for the Insane, Kingston, Ontario, Canada.

1880 Mills, Robert James, M.B., M.C., All Saints' Green, Norwich.

1876 Milson, Richard Henry, M.D., 88, Finchley road, South Hampstead, N.W.

1869 Milward, James, 27, Charles Street, Cardiff. *Trans.* 1.

1869 Minns, Pembroke R. J. B., M.D., Thetford, Norfolk.

1867 Mitchell, Robert Nathal, M.D., Chester House, Wickham road, Brockley, S.E.

1884 Mitra, Asutosh, L.R.C.P. Ed., Calcutta [per Messrs. Grindlay and Co., Calcutta].

1868 Moothoosawmy, P. S., M.D., F.L.S., Retired Native Surgeon, Uncovenanted Service, and Late Teacher of Midwifery, L. F. Midwifery School, Tanjore, Madras Presidency. *Trans.* 1.

1877 Moon, Frederick, M.B., Bexley house, Greenwich.

1873 Moon, Robert Henry, F.R.C.S., Fern Lodge, Lower Norwood.

1859 Moorhead, John, M.D., Surgeon to the Weymouth Infirmary and Dispensary; Weymouth, Dorset.

1883 Morris, Clarke Kelly, Upper Welland terrace, Spalding.

1879 Moullin, James A. Mansell, M.A., M.B., Assistant Physician to the Hospital for Women and Children, 69, Wimpole street, Cavendish square, W. *Trans.* 1.

1878 Mowat, George, St. Albans. *Trans.* 1.

1877 Murphy, James, M.D., Honorary Surgeon to the General Infirmary, Sunderland, and Lecturer on Botany in the University of Durham College of Medicine at Newcastle-upon-Tyne; Holly House, Sunderland. *Hon. Loc. Sec. Trans.* 1.

Elected

O.F. MURRAY, GUSTAVUS CHARLES P., M.D., Obstetric Physician to the Great Northern Hospital; 66, Great Cumberland place, Hyde park, W. *Council*, 1864-65. 1883-5. *Hon. Sec.* 1866-69. *Vice-Pres.* 1870-72. *Treas.* 1873-77. *Trans.* 3.

1885 MURRAY, CHARLES STORMONT, L.R.C.S. and L.M., Ed., 34, Gloucester place, Portman square, W.

O.F. MUSGRAVE, JOHNSON THOMAS, L.R.C.P. Ed., Irlam villa, 39, Finchley road, N.W. *Council*, 1859-60. *Trans.* 1.

1863 NASON, JOHN JAMES, M.B. Lond., 11, Bridge street, Stratford-on-Avon.

1859 NEAL, JAMES, M.D., late Hon. Surgeon to the Lying-in Hospital, Birmingham; Barcelona House, Sandown, Isle of Wight.

1882 NESHAM, THOMAS CARGILL, M.D., Lecturer in Midwifery in the University of Durham College of Medicine at Newcastle-on-Tyne; 12, Ellison place, Newcastle-on-Tyne.

1881 NETHERCLIFT, WILLIAM HENRY, Junior Athenæum Club, Piccadilly, W.

1876 NEWHAM, JAMES, 16, Princes street, Cavendish square, W.

1859 NEWMAN, WILLIAM, M.D., Surgeon to the Stamford and Rutland Infirmary; Barn Hill House, Stamford, Lincolnshire. *Council*, 1873-75. *Vice-Pres.* 1876-77 *Trans.* 4.

1883 NEWSHOLME, ARTHUR, M.D., 39, High street, Clapham, S.W.

1873 NICHOLSON, ARTHUR, M.B. Lond., 98, Montpellier road, Brighton.

1879 NICHOLSON, EMILIUS ROWLEY, M.D., 89, Camden road, N.W.

1876 NIX, EDWARD JAMES, M.D., 143, Great Portland street, W.

1882 NORMAN, JOHN EDWARD, Lismore House, Hebburn-on-Tyne.

1883 NUNN, PHILIP W. G., L.R.C.P. Lond., Christchurch road, Bournemouth.

1884 OAKES, ARTHUR, M.D., 99, Priory road, West Hampstead, N.W.

Elected

1880 OAKLEY, JOHN, Holly House, Wood's End, Halifax, Yorkshire.

1876 OGSTON, FRANCIS, M.D., Lecturer on Hygiene and Medical Jurisprudence in the University of Otago; Dunedin, New Zealand.

O.F. OLDHAM, HENRY, M.D., F.R.C.P., Consulting Obstetric Physician to Guy's Hospital; 4, Cavendish place, Cavendish square, W. *Vice-Pres.* 1859. *Council*, 1860, 1865-66. *Treas.* 1861-62. *Pres.* 1863-64. *Trans.* 1. *Trustee.*

1884 OPENSHAW, THOMAS HORROCKS, M.B., London Hospital, E.

1869 ORD, GEORGE RICE, Streatham hill, Surrey. *Council* 1881.

1880 ORTON, CHARLES, M.D., Nelson place, Newcastle-under-Lyme, Staffordshire.

1877 OSTERLOH, PAUL RUDOLPH, M.D. Leipzic; Dresden.

1863 OSWALD, JAMES WADDELL JEFFRIES, M.D., 245, Kennington road, S.E. *Trans.* 4.

1884 OSWALD, ROBERT JAMES WILLIAM, L.R.C.P., 212, Clapham road, S.W.

1880 OUTHWAITE, WILLIAM, Hebert House, Denmark Hill, S.E.

1883 PALMER, JOHN IRWIN, Warwick lodge, Kingston-on-Thames.

1877 PALMER, MONTAGU H. C., London road, Newbury, Berks.

1877* PARAMORE, RICHARD, M.D., 18, Hunter street, Brunswick square, W.C.

1882 PARKES, LOUIS, M.D., 51, Cadogan square, S.W.

1867 PARKS, JOHN, Bank House, Manchester road, Bury, Lancashire.

1873 PARKS, LUTHER, A.M., M.D., 1, Place Duplaa, Pau, France. [Agents: Messrs. Baring Brothers & Co., 8, Bishopsgate street within, E.C.]

1872 PARR, GEORGE, M.D., 18, Upper Phillimore place, Kensington, W.

1880 PARSONS, SIDNEY, 78, Kensington park road, W.

1865* PATERSON, JAMES, M.D., Hayburn Bank, Partick, Glasgow.

1879 PAULI, THEOPHILUS WILLIAM, L.R.C.P. Ed., Luton, Beds.

Elected

1874 PAYNE, WILLIAM S. HELE, 54, Queen's Road, Peckham, S.E.

1882* PEACEY, WILLIAM, M.B., 214, Lewisham high road, S.E.

1864 PEARSON, DAVID RITCHIE, M.D., 23, Upper Phillimore place, Kensington, W.

1871 PEDLER, GEORGE HENRY, 6, Trevor terrace, Rutland gate, S.W.

1880 PEDLEY, THOMAS FRANKLIN, Rangoon, India.

1881 PENNY, GEORGE TOWN, B.A., Stanley House, Oakfield road, Upper Tollington Park, N.

1881 PERIGAL, ARTHUR, M.D., New Barnet, Herts.

1871 PERRIGO, JAMES, M.D., 163, Bleury street, Montreal, Canada. *Hon. Loc. Sec.*

1879* PESIKAKA, HORMASJI DOSABHAI, 23, Hornby row, Bombay.

1883 PETTIFER, EDMUND HENRY, 29, Stoke Newington green, N.

1879 PHIBBS, ROBERT FEATHERSTONE, L.R.C.P. Ed., Pelham House, 30, Sutherland gardens, Maida vale, W.

1879 PHILLIPS, GEORGE RICHARD TURNER, 24, Leinster square, Bayswater, W.

1882 PHILLIPS, JOHN, B.A., M.B., M.R.C.P., Physician to the British Lying-in Hospital; Senior Assistant Physician, Chelsea Hospital for Women; 125, Harley street, W.

1878 PHILPOT, JOSEPH HENRY, M.D., 13, South Eaton place, S.W.

1871 PHILPS, PHILIP GEORGE, 4, Queen's road, Peckham, S.E.

1876 PICARD, P. KIRKPATRICK, M.D., 59, Abbey road, St. John's Wood, N.W.

1874 PIGG, THOMAS, M.D., M.R.C.P., Physician to the Manchester Southern Hospital for Women and Children; 98, Mosley street, Manchester.

1866 PILCHER, WILLIAM JOHN, 43, High street, Boston, Lincolnshire.

1864 PLAYFAIR, W. S., M.D., LL.D., F.R.C.P., Physician Accoucheur to H.I. & R.H. the Duchess of Edinburgh; Professor of Obstetric Medicine in King's College, and Obstetric Physician to King's College Hospital; 31, George street, Hanover Square, W. *Council*, 1867. 1883-5. *Hon. Librarian*, 1868-9. *Hon. Sec.* 1870-72. *Vice-Pres.*, 1873-5. *Pres.* 1879-80. *Trans.* 14.

Elected

1880 POCOCK, FREDERICK ERNEST, M.D., The Limes, St. Mark's road, Notting hill, W.

1883 POCOCK, WALTER, Broadlands, Effra road, Brixton, S.W.

O.F.* POLLARD, WILLIAM, Surgeon to the Torbay Hospital; Southlands, Torquay, Devon.

1883 POOK, WILLIAM JOHN, L.R.C.P., 2, Hemingford road, N.

1877 POOLE, S. WORDSWORTH, M.D., Dunedin, Sidcup, Kent. *Trans.* 1.

1876 POPE, H. CAMPBELL, M.D., F.R.C.S., Broomsgrove Villa, 280, Goldhawk road, Shepherd's Bush, W.

1882 PORTER, JOSEPH FRANCIS, M.D., 1, Bow road, E.

1864 POTTER, JOHN BAPTISTE, M.D., F.R.C.P., Obstetric Physician to, and Lecturer on Midwifery and Diseases of Women at, the Westminster Hospital; 20, George street, Hanover square, W. *Council*, 1872-6. *Hon. Lib.* 1877-8. *Vice-Pres.* 1879-81. *Treas.* 1882-4. *Pres.* 1885-6. *Trans.* 1.

1875 POWDRELL, JOHN, 160, Euston road, N.W.

1884 POWELL, JOHN JAMES, L.R.C.P. Lond., Blyton House, Weybridge.

1863 POWELL, JOSIAH T., M.D., 347, City road, E.C.

1885 PRAEGER, EMIL ARNOLD, Victoria, British Columbia.

1864 PRICE, WILLIAM NICHOLSON, Lecturer on Midwifery and the Diseases of Women and Children at the Leeds School of Medicine; Mount Pleasant, Leeds. *Council*, 1876-8.

1880 PRICKETT, MARMADUKE, M.A. Cantab., M.D., Physician to the Samaritan Hospital; 12, Devonport street, Gloucester square, W.

O.F. PRIESTLEY, WILLIAM O., M.D., LL.D., F.R.C.P., Consulting Obstetric Physician to King's College Hospital; and Consulting Physician-Accoucheur to the St. Marylebone Infirmary; 17, Hertford street, Mayfair, W. *Council*, 1859-61, 1865-66. *Vice-Pres.* 1867-69. *Pres.* 1875-76. *Trans.* 6.

1884 PRONGER, CHARLES ERNEST, L.R.C.P., Litchdon, Barnstaple.

Elected

1876 QUIRKE, JOSEPH, L.R.C.P. Ed., The Oaklands, Hunter's lane, Handsworth, Birmingham.

O.F. RANDALL, JOHN, M.D., Lecturer on Medical Jurisprudence, St. Mary's Hospital Medical School; Medical Officer, St. Marylebone Infirmary; 204, Adelaide road, N.W. *Council*, 1877.

1861 RASCH, ADOLPHUS A. F., M.D., Physician for Diseases of Women to the German Hospital; Physician to the Training Hospital, Tottenham; 7, South street, Finsbury square, E.C. *Council*, 1871-3. *Trans.* 5.

1878 RAWLINGS, JOHN ADAMS, M.R.C.P. Ed., 4, Northampton terrace, Swansea.

1870 RAY, EDWARD REYNOLDS, Dulwich, Kent, S.E.

1860* RAYNER, JOHN, M.D., Swaledale House, Quadrant road north, Highbury New Park, N.

1879 READ, THOMAS LAURENCE, 11, Petersham terrace, Queen's gate, S.W.

1874 REES, WILLIAM, Priory House, 129, Queen's crescent, Haverstock hill, N.W.

1879 REEVE, HENRY, 57, Stepney green, E.

1879 REID, WILLIAM LOUDON, M.D., 7, Royal crescent, Glasgow.

1875* REY, EUGENIO, M.D., 39, Via Cavour, Turin.

1862 RICHARDS, DAVID, Llangeitho, Cardiganshire. *Trans.* 1.

1862 RICHARDS, S. SMITH C., 36, Bedford square, W.C.

1872 RICHARDSON, WILLIAM L., M.D., A.M., Assistant Professor of Obstetrics in Harvard University; Visiting Physician to the Massachusetts General Hospital and to the Boston Lying-in Hospital; 225, Commonwealth avenue, Boston, Massachusetts, U.S.

1872 RIGDEN, GEORGE, Surgeon to the Canterbury Dispensary; 60, Burgate street, Canterbury. *Trans.* 1.

1871 RIGDEN, WALTER, 231, Brompton road, S.W. *Council*, 1882-3. *Trans.* 1.

Elected

O.F.* ROBERTS, DAVID LLOYD, M.D., F.R.C.P., F.R.S. Edin., Obstetric Physician to the Manchester Royal Infirmary; Physician to St. Mary's Hospital, Manchester; and Lecturer on Clinical Midwifery and the Diseases of Women in Owens College; 11, St. John street, Deansgate, Manchester. *Council*, 1868-70, 1880-2. *Vice-Pres.* 1871-2. *Trans.* 5. *Hon. Loc. Sec.*

1867 ROBERTS, DAVID W., M.D., 56, Manchester street, Manchester square, W.

1883 ROBERTS, JOHN CORYTON, L.R.C.P. Ed., Avenue House, Peckham Rye, S.E.

1874 ROBERTSON, WILLIAM BORWICK, M.D., West Dulwich, S.E.

1884 ROBINSON, LUKE, M.R.C.P. Lond., San Francisco, California.

O.F. ROBINSON, THOMAS, M.D., 5, Woburn square, W.C.

1876 ROE, JOHN WITHINGTON, M.D., Ellesmere, Salop.

O.F. ROGERS, WILLIAM RICHARD, M.D., Physician to the Samaritan Free Hospital for Women and Children; Consulting Physician to the Hospital for Women, Vincent square, S.W.; 56, Berners street, Oxford street, W. *Council*, 1870-72. *Trans.* 4.

1874 ROOTS, WILLIAM HENRY, Canbury House, Kingston-on-Thames.

1874 ROPER, ARTHUR, 17, Granville park, Blackheath, S.E. *Council*, 1886.

1865 ROPER, GEORGE, M.D., Consulting Physician to the Royal Maternity Charity; Physician to the Royal Hospital for Diseases of Children and Women, Waterloo Bridge road; 19, Ovington gardens, S.W. *Council*, 1875-77. 1883-5. *Vice-Pres.* 1879-81. *Trans.* 10.

1859 ROSE, HENRY COOPER, M.D., Rosslyn hill, Hampstead, N.W. *Council*, 1875-77. *Trans.* 4.

1880 ROSS, DAVID PALMER, M.D., Freetown, Sierra Leone.

1883 ROSSER, WALTER, M.D., 1, Wellesley villas, Croydon.

Elected

1884 ROSSITER, GEORGE FREDERICK, M.B., Cairo Lodge, Weston-super-Mare.

1885 ROUGHTON, EDMUND WILKINSON, M.D., St. Bartholomew's Hospital, E.C.

1884 ROUGHTON, WALTER, L.R.C.P. Lond., Station road, New Barnet.

1582 ROUTH, AMAND J. McC., M.D., B.S., Assistant Obstetric Physician, Charing Cross Hospital; Physician to the Samaritan Free Hospital; 6, Upper Montagu street, W. *Council*, 1886.

O.F. ROUTH, CHARLES HENRY FELIX, M.D., Consulting Physician to the Samaritan Free Hospital for Women and Children; 52, Montagu square, W. *Council*, 1859-61. *Vice-Pres.* 1874-6. *Trans.* 13.

1881 ROWORTH, ALFRED THOMAS, Grays, Essex.

1882 RUSSELL, FRANCIS J. R., L.K.Q.C.P., 48, Lupus street, S.W.

1870 RUSSELL, LOGAN D. H., M.D., Government Park Estate, near Spanish Town, Jamaica (2, St. James's road, New Brighton).

1866 SABOIA, V., M.D., 34, Rua do Visconde Maranguape, Rio de Janeiro. *Trans.* 2.

1883 SALTER, FRANCIS JOSEPH, L.R.C.P. Ed., 9, Lyddon terrace, Leeds.

1864 SALTER, JOHN H., D'Arcy House, Tolleshunt D'Arcy, Kelvedon, Essex.

1875 SALZMANN, FREDERICK WILLIAM; Senior Surgeon to the Hospital for Women; 18, Montpellier road, Brighton. *Council*, 1880-2. *Hon. Loc. Sec.*

1868* SAMS, JOHN SUTTON, St. Peter's Lodge, Eltham road, Lee, S.E.

1872 SANGSTER, CHARLES, 158, Lambeth road, S.E.

1870 SAUL, WILLIAM, M.D., 44, Bedford square, W.C.

1872 SAVAGE, THOMAS, M.D., Surgeon to the Birmingham and Midland Hospital for Women; 33, Newhall street, Birmingham. *Council*, 1878-80. *Hon. Loc. Sec.*

Elected

1877 SAVORY, CHARLES TOZER, M.D., 6, Douglas road, Canonbury, N. *Trans.* 1.

O.F. SCOTT, JOHN, F.R.C.S., 10, Tavistock square, W.C. *Council*, 1868-70. *Vice-Pres.* 1871-3. *Trans.* 1.

1870 SCOTT, JOHN, M.D., New street, Sandwich.

1866 SEQUEIRA, JAMES SCOTT, 68, Leman street, Goodman' fields, E., and Crescent House, Cassland Crescent, Cassland road, South Hackney.

1882 SERJEANT, DAVID MAURICE, M.D., 1, The Terrace, Camberwell, S.E.

1875 SETON, DAVID ELPHINSTONE, M.D., 12, Thurloe place, South Kensington. *Council*, 1884.

1860 SEWELL, CHARLES BRODIE, M.D., 21, Cavendish square, W., and 13, Fenchurch street, E.C. *Council*, 1880-2.

O.F. SHARPIN, HENRY WILSON, F.R.C.S., Surgeon to the Bedford General Infirmary, Bedford. *Council*, 1871-3. *Trans.* 1.

1882 SHEARD, WILLIAM FRANCIS, L.R.C.P. Ed., Clyde House, Putney, S.W.

1867 SHEPHERD, FREDERICK, L.R.C.P. Ed., 33, King Henry's road, Primrose hill, N.W.

1874 SINCLAIR, ALEXANDER DOULL, M.D., Consulting Physician to the Boston Lying-in Hospital; Member of the Board of Consulting Physicians and Surgeons, Boston City Hospital; 35, Newbury street, Boston, Massachusetts, U.S.

1876 SIRIGNANO, GIOSUE, M.D., 24, Strada Banchi Nuovi, Napoli.

1874 SKINNER, STEPHEN, M.B., Ferndale, Clevedon, Somerset.

1884 SLATER, DRUCE JOHN, M.B., Portinscale House, Putney, S.W.

1879 SLIGHT, GEORGE, M.D., 3, Clifford street, Bond street, W.

1881 SLOAN, ARCHIBALD, M.B., 272, Bath street, Glasgow.

1876 SLOAN, SAMUEL, M.D., C.M., 1, Newton terrace, Glasgow.

Elected

1861 SLYMAN, WILLIAM DANIEL, 26, Caversham road, Kentish Town, N.W. *Council*, 1881.

1867 SMITH, HEYWOOD, M.D., 18, Harley street, Cavendish square, W. *Council*, 1872-5. *Trans.* 6.

1884 SMITH, JAMES MURRAY, M.B., C.M., Wellesley Villa, Romford.

O.F. SMITH, PROTHEROE, M.D., Consulting Physician to the Hospital for Women, Soho square; 42, Park street, Grosvenor square, W. *Trans.* 2.

1875 SMITH, RICHARD THOMAS, M.D., Physician to the Hospital for Women, Soho square; 53, Haverstock hill, N.W.

1882 SMITH, STEPHEN MABERLY, L.R.C.P. Ed., Yarra street, Geelong, Melbourne. [Per Henry M. Smith, 17, St. Bride street, Ludgate circus, E.C.]

1879 SMITH, WM. HUGH MONTGOMERY, L.R.C.P. Ed., 24, London road, West Croydon, Surrey.

1876 SNELL, EDMUND GEORGE CARRUTHERS, 102, Bonner road, Victoria park, E.

1882 SNELL, GEORGE, L.R.C.P. Ed., Fort Canje, Berbice, B. Guiana.

1868 SPAULL, BARNARD E., Lynwood House, 47, Hammersmith road.

1876 SPENCER, LIONEL DIXON, M.D., Bengal Army [care of Messrs. Grindlay and Co., 55, Parliament street].

1882 SPOONER, FREDERICK HENRY, M.D., Howard House, Lower Clapton, E.

1876 SPURGIN, HERBERT BRANWHITE, 45, Abington road, Northampton.

1884 STANSBY, CHARLES JOHN, M.D., Hamilton, Bermuda.

1884 STARKIE, RICHARD FRANCIS, M.D., 47, Sussex street, S.W.

1884 STEVENSON, EDMOND SINCLAIR, L.R.C.P. Ed., Rondebosch, Cape of Good Hope.

1877 STEPHENSON, WILLIAM, M.D., Professor of Midwifery, University of Aberdeen; 297, Union Street, Aberdeen. *Council*, 1881-3. *Trans.* 1.

Elected

1873 STEWART, JAMES, M.D., 2, Skinner street, Whitby, Yorkshire.

1875* STEWART, WILLIAM, L.R.C.P. Ed., Highfield House, Barnsley, Yorkshire.

1876 STEWART, WILLIAM EDWARD, F.R.C.S. Ed., 16, Harley Street, W.

1879 STILWELL, ROBERT R., M.D., Beckenham, Kent.

1884 STIVEN, EDWARD W. F., M.D., Lincoln House, Harrow-on-the-Hill.

1884 STIVENS, BERTRAM H. LYNE, 37, Princes square, Hyde park, W.

1883 STOCKS, FREDERICK, 421, Wandsworth road, S.W.

O.F. STOWERS, NOWELL, 125, Kennington park road, Kennington, S.E.

1866 STRANGE, WILLIAM HEATH, M.D., 2, Belsize avenue, Belsize park, N.W. *Council*, 1882-4.

1871 STURGES, MONTAGUE J., M.D., The Limes, Beckenham, Kent.

1884 SUNDERLAND, SEPTIMUS, M.D., Royal Hospital for Children and Women, Waterloo-bridge road, S.E.

1880 SUTHERLAND, CHARLES JAMES, L.R.C.P. Ed., 16, Frederick street, South Shields, Durham.

1883* SUTHERLAND, HENRY, M.A., M.D. Oxon., M.R.C.P., 6, Richmond terrace, Whitehall, S.W.

1862 SUTTON, FIELD FLOWERS, M.D., Balham hill, Clapham, S.W.

1859 SWAYNE, JOSEPH GRIFFITHS, M.D., Physician-Accoucheur to the Bristol General Hospital; Harewood House, 74, Pembroke road, Clifton, Bristol. *Council*, 1860-61, *Vice-Pres.* 1862-64. *Trans.* 7. *Hon. Loc. Sec.*

1883 TAIT, EDWARD SABINE, M.B., 54, Highbury park, N. *Trans.* 1.

1879 TAIT, EDWARD W., 54, Highbury park, N. *Council*, 1886.

1871 TAIT, LAWSON, F.R.C.S., Surgeon to the Birmingham and Midland Hospital for Women; Consulting Surgeon to the West Bromwich Hospital; 7, The Crescent, Birmingham. *Trans.* 12.

Elected

1880 TAKAKI, KANAHEIRO, F.R.C.S., 10, Nishi-Konyachō, Kiō-bashika, Tokio, Japan. *Hon. Loc. Sec.*

1871 TANNER, JOHN, M.D., F.L.S., Physician for Diseases of Women, to the Farringdon General Dispensary, and Obstetric Physician to the Lying-in Charity, Holborn; 19, Queen Anne street, Cavendish square, W.

1859 TAPSON, ALFRED JOSEPH, M.B. Lond., 36, Gloucester gardens, Westbourne terrace, W. *Council*, 1862-64.

1863 TAPSON, JOSEPH ALFRED, Surgeon to the Clapham General Dispensary; 83, High street, Clapham, S.W. *Trans.* 1.

1871 TAYLER, FRANCIS T., B.A. Lond., M.B., Claremont villa, 224, Lewisham high road, S.E.

O.F. TAYLOR, EDWARD, South lodge, Clapham common, S.W. *Council*, 1882.

1881 TAYLOR, F. PERLEY, F.R.C.S. Ed., Charlotte Town, Prince Edward Island, Canada.

1869 TAYLOR, JOHN, Earl's Colne, Halstead, Essex.

1871 TAYLOR, JOHN W., M.D., D.Sc., Rothsay House, Prince of Wales terrace, Scarborough. *Hon. Loc. Sec.*

1885 TAYLOR, WILLIAM CHARLES EVERLEY, M.R.C.P. Edin, 34, Queen street, Scarborough.

1872 TEMPLE, JAMES ALGERNON, M.D., Professor of Obstetrics, Trinity College; Physician to Toronto General Hospital; Physician Accoucheur to the Burnside Lying-in-Hospital; 191, Simcoe-street, Toronto. *Hon. Loc. Sec.*

1862 THANE, GEORGE DANCER, M.D., 15, Montague street, Russell square, W.C. *Council*, 1881.

1884 THOMAS, GEORGE H. W., 79, New North road, N.

1882 THOMAS, HUGH, The Grange, Coventry road, Birmingham.

1867 THOMPSON, JOSEPH, L.R.C.P. Lond., 1, Oxford street, Nottingham. *Trans.* 1.

1878 THOMSON, DAVID, M.D., 17, Market hill, Luton, Bedfordshire.

Elected

1874 THOMSON, WILLIAM SINCLAIR, M.D., 40, Ladbroke grove, Kensington park gardens, W.

1878 THOMSON, WILLIAM ARNOLD, F.R.C.S.I., The Limes, Ampthill, Beds. *Trans.* 1.

1860 THORNE, GEORGE LEWORTHY, M.B., Lenham, near Maidstone, Kent.

1879 THORNTON, J. KNOWSLEY, M.B., C.M., Surgeon to the Samaritan Free Hospital for Women and Children, 22, Portman street, Portman square. *Council*, 1882-3. *Hon. Lib.* 1884-5. *Hon. Sec.*, 1886. *Trans.* 5.

1867 THORNTON, WILLIAM HENRY, Surgeon to the Royal National Hospital for Scrofula; Berkeley Lodge, Margate.

1874 TICEHURST, AUGUSTUS ROWLAND, Silchester House, Pevensey road, St. Leonard's-on-Sea.

1873 TICEHURST, CHARLES SAGE, Petersfield, Hants.

1866 TILLEY, SAMUEL, The Cedars, Cranford, Middlesex.

O.F. TILT, EDWARD JOHN, M.D., Consulting Physician-Accoucheur to the Farringdon General Dispensary; 27, Seymour street, Portman square, W. *Council*, 1867-68. *Vice-Pres.* 1869-70. *Treas.* 1871-2. *Pres.* 1873-4. *Trans.* 7.

1883 TINKER, FREDERICK HOWARD, F.R.C.P. Ed., Brookland House, Hyde, Cheshire.

1879 TIVY, WILLIAM JAMES, F.R.C.S. Ed., 8, Lansdown place, Clifton, Bristol.

1872 TOLOTSCHINOFF, N., M.D., Kieff, Russia.

1869 TOMKINS, CHARLES P., L.K.Q.C.P.I., Beddington park, Croydon.

1870 TOWNE, ALEXANDER, 99, Rectory road, Stoke Newington, N.

1884 TRAVERS, WILLIAM, M.D., 2, Phillimore gardens, W.

1873 TREVRAIL, HENRY ERNEST, F.R.C.S., M.R.C.P. Ed., Walmer House, Victoria road, Aldershot. *Trans.* 1.

1884 TROUTBECK, JAMES, M.B., Bushey Heath, Herts.

Elected

1872 TUCHMANN, MARO, M.D., Assistant Surgeon to the German Hospital; 148, Adelaide road, Haverstock hill, N.W.

1865 TURNER, JOHN SIDNEY, Stanton House, 81, Anerley road, Upper Norwood.

1881 TUTHILL, PHINEAS BARRETT, M.D., Royal Victoria Hospital, Netley, Southampton.

1861 TWEED, JOHN JAMES, Junr., F.R.C.S., 14, Upper Brook street, W.

1885 UNDERHILL, EDGAR T., M.B. Ed., Tipton Green, Staffordshire.

1874 VENN, ALBERT JOHN, M.D., Obstetric Physician to the Metropolitan Free Hospital; Physician, Victoria Hospital for Sick Children, Chelsea; Physician for the Diseases of Women, West London Hospital; 8, Upper Brook street, Grosvenor square, W.

1873 VERLEY, REGINALD LOUIS, F.R.C.P. Ed., 28B, Devonshire street, Portland place, W.

1879 WADE, GEORGE HERBERT, Ivy Lodge, Chislehurst, Kent.

1860 WALES, THOMAS GARNEYS, Downham Market, Norfolk.

1883 WALKER, ALEXANDER, M.D., Hotham House, Putney, S.W.

1877 WALKER, GEORGE, L.R.C.P., 12, Lingfield road, Wimbledon.

1866 WALKER, THOMAS JAMES, M.D., Surgeon to the General Infirmary, Peterborough; 18, Westgate, Peterborough. *Hon. Loc. Sec. Council*, 1878-80.

1883 WALLACE, RICHARD UNTHANK, M.B., Cravenhurst, Craven park, Stamford hill, N.

1870 WALLACE, FREDERICK, 96, Cazenove road, Upper Clapton, N. *Council*, 1880-2.

1872 WALLACE, JOHN, M.D., Assistant-Physician to the Liverpool Lying-in Hospital; 1, Gambier terrace, Liverpool. *Hon. Loc. Sec. Council*, 1883-5.

1885 WALLIS, FREDERICK CHARLES, B.A., B.S. Cantab.

1879* WALTER, WILLIAM, M.A., M.D., Surgeon to St. Mary's Hospital, and the Manchester and Salford Lying-in Hospital; 20, St. John street, Manchester.

Elected

1867* WALTERS, JAMES HOPKINS, Senior Assistant Surgeon to the Royal Berkshire Hospital; 15, Friar street, Reading, Berks. *Council*, 1884-6. *Trans.* 1.

1873 WALTERS, JOHN, M.B., Church street, Reigate, Surrey.

1859 WARDEN, CHARLES, M.D., Hon. Surgeon to the Birmingham Lying-in Hospital; 31, Newhall street, Birmingham.

1862 WATKINS, CHARLES STEWART, 16, King William street, Strand, W.C.

1884 WATSON, PERCIVAL HUMBLE, L.R.C.P. Lond., 64, Jesmond road, Newcastle-on-Tyne.

1884 WAUGH, ALEXANDER, L.R.C.P. Lond., Midsomer-Norton, Bath.

1879 WEATHERLY, LIONEL ALEX., M.D., C.M. Aberd., Portishead, Somersetshire.

1867 WEBB, FRED. E., 113, Maida vale, W.

O.F. WEBB, HENRY SPEAKMAN, Welwyn, Herts.

1872 WEBSTER, THOMAS, Malvern House, Redland, near Bristol.

1884 WEDMORE, ERNEST, M.B. Cantab., 23, Davies street, Berkeley square, W.

1876 WEIR, ARCHIBALD, M.D., St. Mungho's, Great Malvern.

1867 WELLER, GEORGE, The Mall, Wanstead, Essex.

1876 WELLS, FRANK, M.D., late Professor of Obstetrics and the Diseases of Women and Children in the Cleveland Medical School; Chapel Station, Brookline, Massachusetts.

O.F. WELLS, SIR T. SPENCER, Bart., F.R.C.S., Surgeon in Ordinary to H.M.'s Household; Consulting Surgeon to the Samaritan Free Hospital for Women and Children; 3, Upper Grosvenor street, W. *Council*, 1859. *Vice-Pres.* 1868-70. *Trans.* 5. *Trustee.*

1876 WHARTON, HENRY THORNTON, M.A. Oxford, 39, St. George's road, Kilburn, N.W.

1870 WHEATCROFT, SAMUEL HANSON, L.R.C.P. Ed., Graig, Llandudno.

Elected

1860 WHEELER, DANIEL, Chelmsford, Essex.

1873 WHITE, FREDERICK BROAD, 98, Portsdown road, Maida vale, W.

1882 WHOLEY, THOMAS, L.R.C.P. Lond., London Hospital, E.

1883 WICKS, WILLIAM CAIRNS, M.B., 1, Park parade, Newcastle-on-Tyne.

1877 WIGMORE, WILLIAM, 130, Inverness terrace, Hyde park, W.

1867 WILBE, RICHARD HAYDOCK, M.D., York Lodge, 21, Finchley road, St. John's Wood, N.W.

1883 WILKINSON, THOMAS MARSHALL, F.R.C.S. Ed., Lincoln.

1879 WILLANS, WILLIAM BLUNDELL, F.R.C.P. Ed., Much Hadham, Herts.

1879 WILLETT, CHARLES VERRALL, 11, Edith road, West Kensington, W.

1872 WILLIAMS, JOHN, M.D., F.R.C.P., Assistant-Obstetric Physician to University College Hospital; 11, Queen Anne street, Cavendish square, W. *Council*, 1875-76. *Hon. Sec.* 1877-9. *Vice-Pres.* 1880-2. *Chairman Midwifery Board* 1884-6. *Trans.* 11.

1881 WILLIS, JULIAN, M.R.C.P. Ed., 82, Sutherland gardens, Maida vale, W.

1885 WILSON, ALBERT, M.D., Minto House, Fairlop road, Leytonstone, E.

1873 WILSON, JOHN HENRY, L.K.Q.C.P. Ireland, Obstetric Physician to the Ladies' Charity and Lying-in Hospital; Kensington Lodge, Kensington, Liverpool.

1860 WILSON, ROBERT JAMES, F.R.C.P. Ed., 7, Warrior square, St. Leonard's-on-Sea, Sussex. *Hon. Loc. Sec. Vice-Pres.* 1878-80.

1866 WILTSHIRE, ALFRED, M.D., F.R.C.P., Torridon, Somers road, Reigate. *Council*, 1870. *Hon. Lib.* 1871-3. *Hon. Sec.* 1874-6. *Vice-Pres.* 1877-9. *Trans.* 5.

1877 WINTLE, HENRY, M.B., Kingsdown, Church road, Forest hill, S.E.

Elected

1880 WOODWARD, G. P. M., M.D., Sydney, New South Wales.

O.F. WORSHIP, J. LUCAS, Manor House, Riverhead, Sevenoaks, Kent. *Council*, 1875-77. *Vice-Pres.* 1883-5. *Trans.* 3.

1881 WORTHINGTON, GEORGE FINCH JENNINGS, M.K.Q.C.P., Highden, Sidcup.

1876 WORTS, EDWIN, 6, Trinity street, Colchester.

1871 YARROW, GEORGE EUGENE, M.D., 87, Old street, E.C. *Council*, 1881-3.

1885 YOUNG, ADAM, L.R.C.P. Lond., Sevenoaks.

1882 YOUNG, CHARLES GROVE, M.D., New Amsterdam, Berbice, British Guiana.

1861 YOUNG, WILLIAM BUTLER, 10, Castle street, Reading, Berks.

CONTENTS.

	PAGE
List of Officers for 1886	v
List of Presidents	vii
List of Referees of Papers for 1886	viii
Standing Committees	ix
List of Honorary Local Secretaries	x
Trustees of the Society's Property	xi
List of Honorary and Corresponding Fellows	xi-xiii
List of Ordinary Fellows	xiv
Contents	lv
List of Plates	lxi
Advertisement	lxiv
Hours of Attendance at Library	lxiv

January 14th, 1885—

Vaginal Extirpation of Cancerous Uterus, shown by Dr. EDIS	2
Urethral Calculus, shown by Dr. AMAND ROUTH	3
New Electrical Light, shown by Dr. HEYWOOD SMITH	3
Porro's Operation, Uterus removed by, shown by Dr. M. HANDFIELD JONES	4
Vaginal Hysterectomy, shown by Dr. PURCELL	5
Cancerous Cervix, shown by Dr. GODSON	6
I. On Extirpation of the Entire Uterus. By WILLIAM A. DUNCAN, M.D., M.R.C.P. Lond., F.R.C.S. Eng.	8

PAGE

February 4th, 1885—

Annual Meeting 45
Dermoid Cysts of both Ovaries, shown by Mr. J. KNOWSLEY THORNTON 46
II. The Prevention of Ophthalmia Neonatorum and of its Ravages. By DAVID MCKEOWN, M.A., M.D. (communicated by Dr. GRAILY HEWITT) . . 49
Alterations in the Laws 57
—— Chapter I 58
—— Chapter XV 58
—— Chapter XVI 59
Annual Meeting: Election of Council and Officers for the year 1885 59-60
—— The Audited Report of the Treasurer (Dr. J. B. POTTER) 60-61
—— Report of the Honorary Librarian for 1884 (Mr. J. KNOWSLEY THORNTON) . . . 60
—— Report of the Board for the Examination of Midwives for 1884. By JOHN WILLIAMS, M.D. . 62
—— Annual Address of the President (HENRY GERVIS, M.D.) 64

March 4th, 1885—

Distension of Uterus from Partial Obstruction of Cervix, shown by Dr. GALABIN . . . 81
Inverted Uterus, shown by Dr. HERMAN . . 83
Inaugural Address of the President (J. B. POTTER, M.D.) 85
Adjourned Discussion on Dr. WILLIAM A. DUNCAN'S paper on Extirpation of the Entire Uterus . 93

April 1st, 1885—

Fibro-Sarcoma of Chorion, shown by Dr. GALABIN . 107
III. Sequel to a Case of Ovariotomy. By JAMES MURPHY, M.D. 108
IV. On the Circulation in the Uterus, with some of its Anatomical and Pathological Bearings. By JOHN WILLIAMS, M.D., F.R.C.P. . . . 112

PAGE

V. Note on a Case of Absence of the Uterus and Occlusion of the Vagina. By Dr. F. BOUSQUET (communicated by Dr. GERVIS and translated by Dr. HERMAN) 123

May 6th, 1885—

Malformed Fœtus, shown by Dr. HORROCKS . 131
Two Cases of Imperforate Rectum, shown by Dr. HORROCKS 135
Double Pyosalpinx, shown by Dr. MALINS . . 137

VI. On the Ulceration of Lupus of the Female Generative Organs, including Perforations, Pits, and Excavations. By J. MATTHEWS DUNCAN, M.D., F.R.S. . 139

VII. Case of Fibroid Tumour complicating delivery treated by Enucleation. By W. HANKES DAY . . 158

June 3rd, 1885—

Pessaries, shown by Dr. GERVIS 163
Specimen showing the relations to each other of Inflammation of the Endometrium, Fallopian Tube, Ovary, and Pelvic Peritoneum, shown by Mr. ALBAN DORAN 164
Serous Perimetritis, shown by Dr. W. S. A. Griffith . 168

VIII. On Serous Perimetritis. By JOHN WILLIAMS, M.D., F.R.C.P. 169

IX. Notes of a Specimen of the Pseudo-Osteo-Malacic Pelvis of Naegele. By WALTER S. A. GRIFFITH, M.B., F.R.C.S. 186

July 1st, 1885—

Rupture of the Uterus, shown by Dr. ROBERT HARVEY 191
Malignant Dermoid Ovarian Cyst, shown by Mr. J. KNOWSLEY THORNTON . . . 194
Atrophy of Chorion, shown by Dr. HERMAN . 195

X. Notes of a Visit to some of the Lying-in Hospitals in the North of Europe; and particularly on the advantages of the Antiseptic System in Obstetric Practice. By W. O. PRIESTLEY, M.D., L.L.D. 197

PAGE

October 7th, 1885—

Fœtus and Membranes from a case of Missed Abortion, shown by Mr. ALBAN DORAN . . . 224

Case of Supposed Extra-Uterine Gestation with Birth through Uterus, shown by Mr. E. F. GRÜN . 226

Report of the Committee appointed to examine Dr. HARVEY'S specimen of Rupture of the Uterus . 228

XI. On the Hypertrophy of Lupus of the Female Generative Organs. By J. MATTHEWS DUNCAN, M.D., F.R.S. 230

November 4th, 1885

Broad Ligament Cyst with Septa, shown by Dr. W. S. A. GRIFFITH 251

Chancre on the Cervix Uteri, drawing shown by Dr. HERMAN 252

XII. On the Suppuration and Discharge into Mucous Cavities of Dermoid Cysts of the Pelvis. By G. ERNEST HERMAN, M.B., F.R.C.P. . . 254

XIII. Case of Obstructed Labour in which Spontaneous Version followed an unsuccessful attempt to deliver by the Crotchet after Craniotomy. By S. D. HINE, M.R.C.S. (communicated by Dr. GERVIS) . 293

December 2nd, 1885—

Double Pyosalpinx with Rupture of the Tubes, shown by Dr. LEWERS 298

XIV. Further Note on the Corroding Ulcer of the Os Uteri. By JOHN WILLIAMS, M.D., F.R.C.P. . . 300

Extra-Uterine Gestation, shown by Dr. W. S. A. GRIFFITH 304

Female Twin Monster, shown by Dr. GALABIN for Dr. LEWIS JONES 305

Report on Mr. E. F. GRÜN'S Specimen of supposed Extra-Uterine Gestation with Birth through Uterus 306

XV. Case of Protracted Pregnancy. By W. ARNOLD THOMSON 308

XVI. On the Inflammation of Lupus of the Pudendum, with Histological Observations and Remarks on Lupus. By J. MATTHEWS DUNCAN, M.D., F.R.S., and G. THIN, M.D. 310

PAGE

XVII. A Case of Spurious Labour. By H. Roxburgh Fuller, M.A., M.B. Cantab. . . . 326

Index 333

Additions to the Library . . . 349

PLATES.

		PAGE
I.	Circulation in the Uterus (Dr. JOHN WILLIAMS)	112
II.	Ditto Ditto Ditto	112
III.	Ditto Ditto Ditto	112
IV.	Ulceration of Lupus of the Female Generative Organs. Case 1 (Dr. MATTHEWS DUNCAN)	149
V.	„ 2 Ditto	150
VI.	„ 3 Ditto	151
VII.	„ 4 Ditto	152
VIII.	Hypertrophy of Lupus of the Female Generative Organs. Case 1 (Dr. MATTHEWS DUNCAN)	235
IX.	„ 2 Ditto	236
X.	„ 3 Ditto	237
XI.	„ 4 Ditto	238
XII.	„ 5 Ditto	240
XIII.	„ 6 Ditto	242
XIV.	Fibro-sarcoma of Chorion (Dr. GALABIN)	108
XV.	Chancre on the Cervix Uteri (Dr. HERMAN)	252
XVI.	Illustrating Histological Observations in Dr. MATTHEWS DUNCAN'S paper on the Inflammations of Lupus of the Pudendum (Dr. THIN)	324
XVII.	Ditto Ditto	324
XVIII.	Ditto Ditto	324

WOODCUTS.

Extirpation of the Entire Uterus (Dr. WM. A. DUNCAN).

Temperature Chart 1 9

Ditto 2 15

Ditto 3 17

Circulation in the Uterus (Dr. JOHN WILLIAMS)

Uterus and Vagina with their Venous Supply seen from behind (Luschka) 116

WOODCUTS (*continued*).

PAGE

Serous Perimetritis (Dr. JOHN WILLIAMS)
Temperature Chart 171
Ditto 175
Ditto 177
Pseudo-Osteo-Malacic Pelvis of Naegele (Dr. W. S. A. GRIFFITH)
Fig. 1.—Showing triangular brim of Pelvis . . 188
Fig. 2.—Showing curved Sacrum with the Ilia moulded to it 190
Antiseptics in Lying-in-Hospitals (Dr. W. O. PRIESTLEY)
Plan of Lying-in-Hospital in Copenhagen . . 199
Corroding Ulcer of the Os Uteri (Dr. JOHN WILLIAMS)
Fig. 1.—Showing opening where ulceration has opened the Bladder 301
Fig. 2.—Bladder opened, showing opening from Vagina into Bladder 302
Female Twin Monster (Dr. GALABIN) . . . 305

ADVERTISEMENT.

THE SOCIETY is not as a body responsible for the facts and opinions which are advanced in the following papers and communications read, nor for those contained in the abstracts of the discussions which have occurred at the meetings during the Session.

53, BERNERS STREET.

LIBRARY AND MUSEUM,

54, BERNERS STREET, W.

Hours of Attendance: Monday to Friday, 1.30 p.m. to 6 p.m., Saturday, 9 a.m. to 11 a.m., and in the Evenings on which the Society meets, from 7.15 p.m. to 7.45 p.m.

OBSTETRICAL SOCIETY

OF

LONDON.

SESSION 1885.

JANUARY 14TH, 1885.

HENRY GERVIS, M.D., President, in the Chair.

Present—53 Fellows and 15 visitors.

Books were presented by Dr. Cullingworth, Messrs. R. W. Parker and S. G. Shattock, Sir Spencer Wells, Bart., Dr. V. Gautier, and Dr. Sirignano.

Harry John Forster, L.R.C.S.I.; Thomas Rutherford Adams, M.D. (Croydon); and Ernest Wedmore, M.B. Cantab., were admitted Fellows of the Society.

Alexander Ford, L.R.C.P. (Waterford); Charles John Gibb, M.D. (Newcastle-on-Tyne); Robert Nicholls Ingle, M.D. (Cambridge); John James Powell, L.R.C.P. Lond. (Weybridge); E. Sinclair Stevenson, L.R.C.P. Ed. (Cape Town); and Percival H. Watson, L.R.C.P. Lond. (Newcastle-on-Tyne); were declared admitted.

The following were elected Fellows:—William Henry Bourke, L.K.Q.C.P.I.; Lovell Drage, B.A. Oxon. (Hatfield);

P. Sydney Jones, M.D. (Sydney, New South Wales); and Arthur H. N. Lewers, M.B. Lond.

The following were proposed for election:—William John Beatty, L.R.C.P. Ed. (Stockton-on-Tees); P. Inkerman Cook, M.R.C.S. (Honor Oak); William Morriston Davies, M.D. Edin.; Edgar A. Hughes, L.R.C.P. Lond.; James Oswald Lane, B.A., M.B. Cantab. (Northampton); and Adam Young, L.R.C.P. Lond. (Sevenoaks).

VAGINAL EXTIRPATION OF CANCEROUS UTERUS.

Dr. Edis exhibited a uterus affected with cancer, which he had removed in December last from a patient æt. 41. The exaggerated lithotomy position was adopted, and the vaginal operation resorted to. The perinæum was incised on either side to admit of the requisite manipulations being undertaken with greater facility. Ligatures were placed on either side to secure the uterine artery. No unusual difficulty was experienced in the removal of the uterus. The patient went on well for the first few days, but succumbed on the fifth day.

The *post-mortem* examination revealed an absence of general peritonitis. In the lower part of the pelvis a small quantity of blood-stained fluid, rather fœtid in character, was found; a coil of small intestine, deeply congested, was adherent to the divided edges of the vagina. The ligatures used in the operation had not separated. There was no sign of suppuration in or around the parts. The bladder was intact. The heart was pale and flabby. The walls of the left ventricle were thin and pale. Microscopic examination of sections of the cervix uteri, by Dr. Horrocks and Dr. Burnet, showed small cells with fibrous network, in parts showing definite structure of carcinoma.

URETHRAL CALCULUS.

Dr. Amand Routh showed a phosphatic calculus which he had removed from the urethra of a woman æt. 27, who had been bedridden for two years with paraplegia, and paralysis of the bladder, the result of a spinal injury. Latterly she had had chronic cystitis. During one night the stone became fixed at the neck of the bladder, causing retention of urine. Dr. A. Routh tried to push the stone back into the bladder with a view to crushing it, but failed; so rapidly dilated the urethra and drew out the calculus, thereby causing no laceration, or subsequent sloughing.

The two points of interest in the case were: first, the rather large size of the stone, being 2·4 inches in circumference round its smaller diameter, where it was grasped by the urethra; and, secondly, it being difficult to understand how such a stone could get so firmly fixed in the urethra when the bladder was paralysed and all *vis a tergo* thereby absent.

NEW ELECTRICAL LIGHT.

Dr. Heywood Smith exhibited a new electrical light with a small portable battery to fit with a clip on to the edge of a Ferguson speculum. It gave a very good light and offered no impediment to the use of instruments. It could also be fixed on to the stage of a microscope and so used both for opaque and transparent objects.

PORRO'S OPERATION.

Dr. M. Handfield Jones showed a specimen, consisting of the uterus of a woman in whom pregnancy had advanced to the full term but in whom delivery was impossible owing to the impaction of a subperitoneal fibroid in the true pelvis. The tumour, which was seen in the specimen to arise by a short thick pedicle from the lower segment of the uterus on its posterior wall, so completely filled the pelvis that only two thirds of an inch was left between the anterior surface of the tumour and the symphysis. At the time of labour it was found possible to push the tumour up a sufficient distance to justify the operation of craniotomy being attempted. Owing, however, to the forward displacement of the lower uterine segment (together with the presenting head) by the displaced tumour, delivery per vaginam was impracticable and Porro's operation was decided upon. On opening the abdomen the tumour was found to be fixed by adhesions to the right side of the pelvis, but on emptying the uterus and detaching the adhesions the tumour was lifted up out of the pelvic cavity, and the wire of Koeberle's serre-nœud having been passed round the uterus below the attachment of the fibroid growth, the entire mass of tumour, uterus, and appendages was removed. After the incision of the uterus and removal of the fœtus, and while the adhesions were being separated, hæmorrhage was restrained by the application of two clamp forceps to the edges of the uterine incision. The placenta was not disturbed. Death occurred on the third day from peritonitis.

Dr. Champneys observed, that far greater difficulty was experienced with fibroids behind than in front of the uterus, partly on account of the greater length of the posterior pelvic wall, above which they must be raised, and partly on account of the known tendency of bodies connected with the front of the uterus to be pulled up and of those connected with the back of the uterus to be pushed down during labour.

VAGINAL HYSTERECTOMY.

Dr. Purcell exhibited a tumour and uterus with its appendages of one side, the ovary being cystic; and said the double specimen was the result of a successful case of vaginal hysterectomy, in which the patient made a perfect recovery; the reports of her condition to date being satisfactory. On September 23rd, 1883, the patient was operated on by him at the Cancer Hospital; the tumour here shown was the size of a cricket ball and occupied the vagina. It was a cauliflower excrescence and undoubtedly malignant; was attached to the os uteri and left wall of the vagina, and was exceedingly vascular, bleeding on the slightest digital examination, the patient having suffered severe losses from it. It was removed by means of the galvanic écraseur. Not feeling satisfied that all disease was removed, he pinched up the vaginal wall, now charred from the galvanic wire, and his fingers passed through into the pelvic cavity. He decided that the only chance for the patient being freed of the disease was to extirpate the whole organ, and with the consent of his colleagues proceeded to do it. This he succeeded in accomplishing, using all antiseptic precautions. The specimen showed the uterus with the right ovary and Fallopian tube attached; the ovary was cystic, and in size about that of a hen's egg. It was now shown stuffed, together with its Fallopian tube. The uterus had its peritoneal covering intact. No injury was done to the bladder or rectum. The round ligaments were tied with silk, the ends cut short, and the stumps clamped with Wells's forceps, which were of course removed. The diseased wall of the vagina was peeled down, and was separated by the galvanic écraseur; it was seen attached to the uterus in the specimen. Hæmorrhage here gave much trouble; the bleeding vessels were seized with Wells's forceps, four in all, which were left *in sitû* and removed thirty-six hours after. No attempt was made to close the peritoneal cavity. A drainage-tube was

inserted into the vagina to empty itself into a basin of carbolic water. A self-retaining gum-elastic catheter was passed into the bladder. Iodoformed wool tampons plugged up the vagina, and the parts were constantly and freely dusted with iodoform. The patient made an uninterrupted recovery, and left the Cancer Hospital on the forty-second day after operation. She was examined since, and the parts were found smooth and free from disease, and the patient was well in health, having put on a considerable amount of flesh. Dr. Purcell returned thanks to Mr. Briscoe, his house surgeon, for his attention to the case, and to his colleague Mr. Jessett for his assistance at the operation.

Dr. William Duncan pointed out that the extirpated uteri shown by Drs. Edis and Purcell were both specimens of epithelioma commencing in the portio vaginalis and extending laterally but not in the slightest degree implicating the body of the uterus. Therefore, the question arose as to the justifiability of extirpation in these cases; but he did not propose to enter into that, as it could be discussed in the ensuing debate.

CANCEROUS CERVIX.

Dr. Godson showed a cancerous cervix, which he had removed by the wire écraseur nearly two years ago from a patient thirty-seven years of age. She was seen in consultation by an eminent gynæcologist, who advised that no operation should be undertaken because of the induration on one side of the cervix, between it and the pelvis, and the partial fixation of the uterus. The patient's symptoms becoming aggravated Dr. Godson was led to operate upon his own responsibility, hoping that the induration and fixation were simply inflammatory, as he had on several occasions found to be the case. The result of the operation was most satisfactory, for after the stump had

healed the uterus became freely moveable, and the patient is perfectly well at the present time.

Dr. Godson showed a microscopic section of this cervix, as also sections from cancerous cervices which he had removed in cases in which the disease had not reappeared for six years, and three and a half years, respectively.

ON EXTIRPATION OF THE ENTIRE UTERUS.

By Wm. A. Duncan, M.D., M.R.C.P. Lond., F.R.C.S. Eng.

ASSISTANT OBSTETRIC PHYSICIAN TO, AND LECTURER ON PRACTICAL MIDWIFERY AT, THE MIDDLESEX HOSPITAL; OBSTETRIC PHYSICIAN TO THE ROYAL HOSPITAL FOR WOMEN AND CHILDREN; EXAMINER IN MIDWIFERY AND DISEASES OF WOMEN TO THE CONJOINED ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

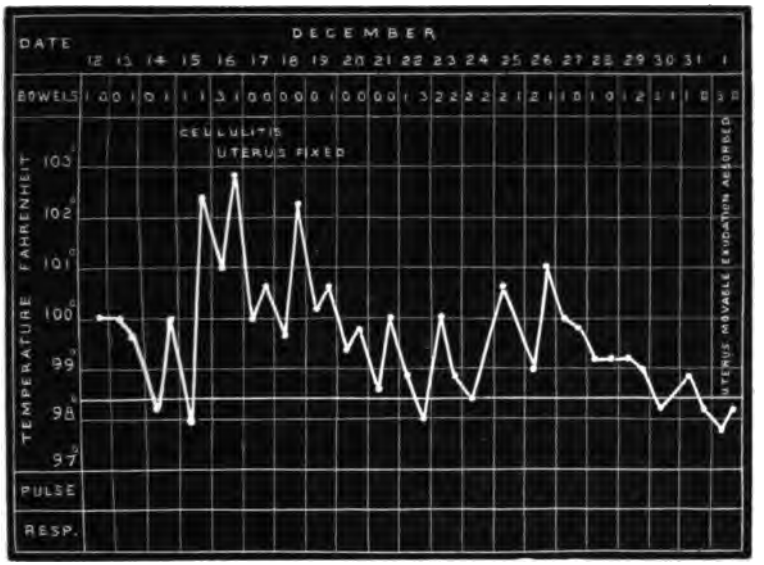
Extirpation of the entire uterus being an operation still *sub judice*, it becomes the duty of everyone who has performed it to publish the result, whether favorable or not. Having excised the uterus twice *per vaginam*, I propose in this paper first to describe each case separately, and then to review the whole subject, discussing the respective merits of the different operations, then the various diseases for which extirpation has been undertaken, more especially with regard to the forms of malignant disease which render the operation advisable or even justifiable.

Hysterectomy or partial removal of the uterus (leaving more or less of the cervix), which is now a well-established procedure, will not be dwelt upon here.

Case 1. *Fungating epithelioma of cervix uteri; removal of the whole uterus per vaginam; recovery.*—Mrs. H—, æt. 37, was admitted into the Royal Hospital for Women and Children on December 11th, 1883, suffering from an attack of pelvic cellulitis. Patient was a well-nourished, but pale woman, complaining of pain in lower abdomen. On examination, the vagina felt hot, uterus tender and somewhat fixed by a parametric exudation, involving especially the left broad ligament. Four days previously, I saw her for the first time in the out-patient department, which

she attended, complaining of emaciation, loss of strength, and a sanious discharge. Had one child eleven years ago and one miscarriage. The note then made on her condition was as follows:—"Uterus freely moveable and not enlarged on bimanual examination. On the anterior lip of the cervix is a fungating growth, about the size of half a walnut, which bleeds freely on being touched; it only slightly extends up the anterior surface of the

CHART 1.



cervix; the posterior lip is apparently healthy; sound not passed."

After admission.—She was ordered opium, effervescing salines with quinine, poultices to the abdomen, and hot water vaginal injections. The inflammatory attack lasted a fortnight, and then the patient gradually improved. (See temperature chart, No. 1.)

January 18th, 1884.—Examined in lithotomy position: uterus freely moveable, but a feeling of some abnormal

thickening in the left broad ligament. The growth has now increased in size and has extended all round the os uteri, involving the whole of the posterior lip, but the vaginal walls are quite free from disease. Sound carefully passed, shows uterine axis normal in length and direction : iodoform freely dusted over the growth.

Extirpation was proposed to the patient and its gravity explained. She readily assented to its performance.

22nd.—Operation at 2 p.m. ; æther ; lithotomy position ; vulva shaved and urine drawn off ; a specially constructed short and wide Sims's speculum was introduced (after the whole of the vulva and vagina had been well washed with a 1 in 20 carbolic solution). The cervix was seized with a strong volsella and pulled downwards and forwards, during which there was free oozing from the vascular growth, then Douglas's pouch was snipped across with scissors. Now (as well as during the whole operation) all bleeding was at once stopped by means of artery forceps, then the left forefinger (well carbolised) was passed into the peritoneal cavity and all round the uterus, which was found to be free from adhesions, but the broad ligaments (especially the left) felt thickened and shortened. Next, the cervix was drawn backwards, the vaginal mucous membrane divided all round and well away from the disease ; the bladder was separated up from the uterus by the finger, and it was then found that the whole uterus could be drawn down more. Some little difficulty was experienced in getting through the peritoneum, as it receded before the finger ; it was, however, caught up with toothed forceps and divided. Next, the lower part of each broad ligament was carefully snipped across and any bleeding points secured with artery forceps, of which there were now a good many in the vagina, so all were removed after the vessels they enclosed had been ligatured with silk. Then the uterus was retroverted and the fundus seized with a pair of strong clamp forceps, but even with much traction it was found most difficult to bring

the right broad ligament into view; with the aid, however, of a broad, flat retractor at the side of the vagina, it could be seen, and an aneurysm needle armed with a double ligature of very stout carbolised silk was passed through it from behind forwards, about three quarters of an inch from the uterus, and so as to include the upper third of the ligament. This portion was tied in two places and divided; the remainder of the ligament was transfixed in its middle, tied in the same manner above and below, then divided, and thus the uterus was freed on the right side. A piece of omentum now appeared, but it was at once replaced and kept up by a large sponge wrung out of hot carbolic solution. The left broad ligament (in the lower part of which a large artery was felt strongly pulsating) was treated in precisely the same manner, tied in three portions, divided, and the uterus removed. There was no oozing from the stumps of the broad ligaments, which now receded from view, but the ligatures on each were left long and brought out on either side of the vagina in a separate bundle. Some more of the vaginal mucous membrane was snipped off in order to be quite away from any disease. The vagina was washed out with a 1 in 40 solution, the sponge removed from the peritoneal cavity, and the whole of the exposed surfaces freely dusted over with iodoform. Next, a double drainage-tube (consisting of two glass tubes a foot long, and separately covered with elastic tubing) was inserted into the vagina; the tubes lay along the posterior wall, one over the other, the upper ends lay in Douglas's pouch, to the lower one was attached a long piece of tubing which passed into a basin of carbolic water under the bed, whilst to the upper one was fixed a piece of tubing a foot long and clamped near the end; tapes secured the tube in position, and the vagina on either side was packed with balls of absorbent wool, dusted over with iodoform, and enclosed in gauze.

About an ounce of blood-stained urine was drawn off, a self-retaining india-rubber catheter introduced into

the bladder, and a half-grain morphia suppository into the rectum. The patient bore the operation very well, the pulse continuing good throughout. The amount of blood lost was trifling.

I would here express my indebtedness to Sir W. Mac Cormac for his assistance and advice during the operation; also to Mr. William Henry Battle, and to the Resident Medical Officer, Mr. J. F. Briscoe, to whose care and skill, during the after-treatment, the favorable termination of the case is largely due.

10 p.m., patient is quite calm and comfortable; smiles and says she has nothing to complain of. Pulse 106, resp. 24, temp. 97·6°.

23rd (1st day).—A.M. Had good night; looks cheerful, complains of thirst; was given a few small lumps of ice during night. Passed four ounces of clear urine. P.M. Irrigation was attempted this morning with a 1 in 80 warm solution of carbolic acid, but when a small quantity had passed in, the patient complained of acute pain in left ovarian region and her face became anxious, so irrigation was not persevered in, nor was it ever again attempted. No sickness; tongue slightly dry, white coated; to have nothing but ice, and one grain opium pill every four hours. Placed on a water pillow and propped up in bed. Slight discoloration of water under bed, in which drainage-tube hangs. Since operation has passed fourteen ounces of urine. Resp. 29, temp. 99·8°, pulse 120, rather running. Iodoform dusted over orifice of vagina, but plugs not interfered with. Ordered a nutrient enema every four hours containing beef tea with pancreatin and pepsin.

24th (2nd day).—A.M. In early part of night complained of pain over left side of abdomen; there was a good deal of tympanites; ice-bag applied by house surgeon gave immediate relief, and patient slept well. This morning she feels comfortable, but complains of pain in stomach after swallowing ice. Allowed small quantities of iced milk; and enemata to be continued. No sickness; tongue white

and moist. Pulse 148, resp. 32, temp. 99°. P.M. Has had good day, feels comfortable, slept well; pupils dull and contracted. Plugs removed from vagina this morning; no discharge whatever or offensive odour. Vagina syringed out with Condy's fluid and plugs renewed. Nutrient enemata continued, and patient has taken a pint of milk in the last twenty-four hours. Temp. 98°.

25th (3rd day).—A.M. Has been sick three times during the night; about three ounces of greenish fluid ejected altogether; face a little pinched, skin hot, abdomen tympanitic, with some tenderness over the hypogastric region; all liquids by the mouth stopped, only to have bits of ice and continue opium; passed sixteen ounces and half of urine in the last twenty-four hours. No further discharge through drainage-tube. Pulse 140, resp. 26, temp. 99·6°. P.M. Retched twice since morning, but was not sick. Had slipped down in bed, so was lifted up and made comfortable, but during this the drainage-tube slipped out of the vagina; there was no discharge, so tubes not reinserted; iodoform plugs passed gently within vulva. Temp. 99·6°.

26th (4th day).—A.M. Had good night; slightly sick at 7.15 this morning; feels and looks well. Pulse 120, resp. 32, temp. 98·2°. Nutrient enemata continued three times a day; only ice by mouth. P.M. No further sickness; abdomen very tympanitic; a good deal of flatus passed per anum, with much relief; ice-bags left off, still nothing but ice by mouth; kept well under the influence of opium by hypodermic injections. Passed thirty ounces of clear urine during last twenty-four hours. Pulse 140, resp. 24, temp. 99·8°.

27th (5th day).—Slept well, no pain or sickness; passed flatus several times with great relief; allowed half an ounce of milk with same amount of soda-water every two hours; ice to suck at intervals: enemata continued. Plugs removed, vagina syringed, and then dusted over with iodoform and fresh plugs inserted. Self-retaining catheter removed, and new one introduced; no lithates

on catheter or in urine. Pulse 144, resp. 28, temp. 98°. P.M. Has been somewhat excited during the day, face flushed: says she feels all right. Temp. 98·8°

28th (6th day).—A.M. Had rather a restless night; passed two loose motions, and wind several times. Patient expresses herself as being "able to do anything"; plugs removed; vagina syringed and new plugs inserted; no discharge whatever. Abdomen flaccid and not tender on manipulation. No sickness or pain. To continue enemata, and milk and soda-water by mouth. Ordered a small wineglassful of champagne with half a teaspoonful of brandy every three hours. Pulse 120, resp. 32, temp. 99·6°. P.M. Had good day, slept well; takes all that is given her and enjoys it. Temp. 100·2°.

29th (7th day).—A.M. Comfortable night; slept seven hours. To continue as before. From this date vagina daily syringed and iodoform plugs introduced. Urine clear, acid, no albumen. Pulse 120, resp. 32, temp. 98·4°. Ordered beef tea alternately with milk every three hours, allowed a little thin arrowroot; champagne and brandy discontinued. P.M. Feeling and looking well, had a slice of bread and butter with a cup of tea this afternoon. Is still being kept well under opium. Temp. 99·8°.

30th (8th day).—Continues to improve; slight cystitis. Pulse 120, resp. 32, temp. 99·2°. P.M. Reading newspaper, and feels quite comfortable. Temp. 100·4.°

31st (9th day).—Had good night; bladder washed out with a Condy's solution. Temp. 99·2°.

Feb. 1st (10th day).—Still progressing favourably. Bladder again washed out; asks for more food. Temp. 98·6°.

2nd (11th day).—Slight amount of discharge on plugs this morning; catheter removed. Allowed to lie on her side. Temp. 98°.

3rd (12th day).—Complains of pain on micturition; there is a good deal of swelling and redness round urethral orifice. Temp. 98·8°.

4th (13th day).—This morning two of the ligatures on

the left side and one on the right came away with the plugs, and each included a small slough. To continue same diet and to have some linseed tea to drink. Temp. 98·4°.

5th (14th day).—Had no sedative last evening so did not have a good night; complains of some pain and tenderness in left lower abdomen. Bowels have not acted since the 27th ult., so ordered an enema of 14 oz. of olive oil. Pulse 120, resp. 26, temp. 98·8°.

CHART 2.

6th (15th day).—Had very good night; bowels were open. Temp. 99·4.

7th (16th day).—Improving; slept well; bowels acted copiously this morning; no pain whatever.

8th (17th day).—Allowed a little mutton, potatoes and vegetables for dinner.

9th (18th day).—Still progressing satisfactorily.

10th (19th day).—Was restless last night until an opium pill was given; to have a pill each night if necessary, not otherwise.

11th (20th day).—Bowels rather relaxed; another ligature came away this morning.

15th (24th day).—Remaining two ligatures came away; very slight vaginal discharge; one iodoform plug to be daily inserted; complains of pain over left ovary.

18th (27th day).—Pain and tenderness over left ovary gradually disappearing.

20th (29th day).—Convalescent, sits up in bed; takes her food well; has no pain or discomfort of any sort.

24th (33rd day).—To be dressed and lie on a sofa.

28th (37th day).—Vaginal examination with Sims's speculum shows a perfectly smooth and healthy arched cicatrix in the vaginal roof; the finger can detect no induration of any kind whatever.

March 1st (39th day).—Discharged, feeling perfectly well in every way.

18th (56th day).—Patient has attended weekly at the hospital and has gained flesh; to-day she woke up with pain and tenderness in left ovarian region with slight nausea; there is some fulness over the site of the pain and decided tenderness on pressure; bimanually the ovary is indistinctly felt.

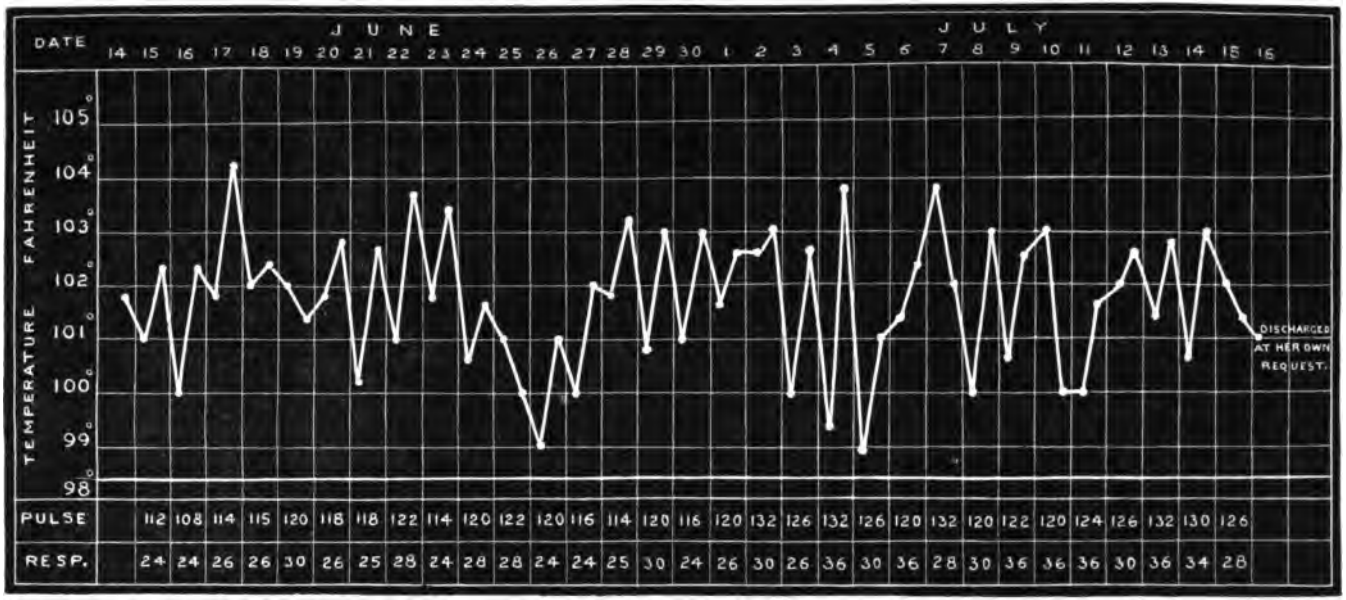
25th (63rd day).—The pain, which patient describes as being exactly similar to what she used to feel before her periods, has gradually disappeared.

April 18th.—A precisely similar attack to that experienced a month ago came on three days ago, is now subsiding.

May 29th (127th day).—Patient examined to-day; vagina feels perfectly healthy, the cicatrix has contracted, but there is no induration or tenderness around. Patient's general health is very good and she is getting stout.

June 14th.—Patient readmitted to the hospital, five months after the operation and three and a half months after her discharge (during my absence from town). Complaining from cough; pain in right side over lower ribs, with loss of appetite and weakness; has lately suffered from night sweats. On examining the lungs the breath-sounds over left apex are puerile; there is crepitation with dry rales to be heard scattered over both lungs in

Chart 3.


DATE
JUNE
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
JULY
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
TEMPERATURE FAHRENHEIT
105° 104° 103° 102° 101° 100° 99° 98°
DISCHARGED AT HER OWN REQUEST.
PULSE
112 108 114 115 120 118 118 122 114 120 122 120 116 114 120 116 120 132 126 132 126 120 132 120 122 120 124 126 132 130 126
RESP.
24 24 26 26 30 26 25 28 24 28 28 24 24 25 30 24 26 30 26 36 30 36 28 30 36 36 36 30 36 34 28

front and behind; no marked dulness. Pulse 112, resp. 24, temp. 101·8°; ordered a saline expectorant mixture, Quiniæ Sulph. grs. iij ter die; beef tea and soda-water.

17th.—Continues to have high temperature, especially at night; looks flushed at night, very pale in day; cough better the last few days. There is no hæmoptysis nor any expectoration whatever. Chest signs the same. Has had some diarrhœa the last two days.

25th.—On my visit to-day I find the patient much altered in appearance from what she was when last I saw her a month ago, is very pale, decidedly emaciated, tongue red, dry, glazed with white aphthous patches; movement of chest walls impaired; scattered crepitation over lungs. On vaginal examination the cicatrix feels healthy, but above the vaginal roof there is a hard indurated mass the size of a small orange; pelvic glands distinctly enlarged. The patient's temperature since admission has been (as seen by Chart 3) very high, with marked intermissions. Neither quinine nor salicylate of soda have had any effect in reducing it. Ordered nourishing diet, stimulants, and a cough linctus.

July 1st.—Has had severe diarrhœa for several days, this is now controlled by sulphate of copper and opium pills, after starch and opium enemata and other astringents had been tried in vain.

7th.—Looks very cachectic; lips rather blue, skin very dry, tongue dry and glazed; cough better, no pain, appetite very bad.

15th.—Continues much the same; persistent high temperature; physical signs the same; begs to be allowed to go home, feeling sure she will get better there.

16th.—Discharged at her own request.

September 18th.—Has been visited at intervals by the resident medical officer, who found she remained much the same except that she got thinner; has been taking a cough linctus and a quinine mixture.

14th.—On calling to see the patient to-day I find her terribly emaciated, there is still crepitation with patches

of dulness over both lungs. She says for the last few days there has been a discharge of "blood and matter" per anum and per vaginam. On making an examination the pelvis is found to be filled by a mass of indurated growth, and in one place the vaginal roof is ulcerated, leading into a cavity with irregular walls.

November 1st.—Died.

Autopsy.—Body emaciated, rigor mortis well marked. Thorax: Right lung slightly adherent to parietes by a few old adhesions. On section it is somewhat œdematous, collapsed at base, otherwise normal. Left lung much more fixed by old and firm adhesions at upper part. On section appearances similar to those in right lung. Heart and pericardium normal. *Abdomen:* Liver large, pale, fatty. Spleen rather large and very soft. Kidneys normal. Pelvic cavity completely filled by a large mass of new growth, the centre of which had broken down into a cavity opening into vagina and discharging fetid *débris*. Bladder fixed to mass, but on section its inner surface was quite healthy. Ureters intact. Left ovary incorporated with growth, reduced in size to about one third, section firm and glistening. No trace of right ovary to be got anywhere.

CASE 2. *Ulcerating epithelioma of cervix uteri; vaginal extirpation; death from shock twelve hours after operation.* —Mrs. P—, æt. 54, admitted into Royal Hospital for Women and Children on February 4th, 1884. Family history good.

Previous history.—Always had good health. Married thirty-two years, has had eight children, youngest fifteen years old; no miscarriages. Menopause ten years ago, quite well from then until eight months ago, when discharge of blood followed coitus; hæmorrhage recurred at intervals without any apparent cause; no offensive odour, no pain, but gradual emaciation. Patient had a severe loss of blood in Christmas week, so applied for relief at the out-patient department. My note then was:

"Thin, healthy-looking woman. Vaginal examination shows the os uteri to be nearly flush with the vaginal roof. It is seated in the middle of a shallow ulcer of about the size of a florin, with pinkish granulations which readily bleed; the margin of the ulcer is of a pinkish colour, slightly undermined and not indurated; the uterus on bimanual examination feels rather bulky and freely moveable; sound not passed."

Not feeling certain whether this was a case of malignant disease, or of the so-called "corroding ulcer of the os uteri," I determined to carefully watch its progress. The patient came weekly to my out-patients' department; the ulcer seemed to get gradually larger until February 2nd, when a profuse flooding took place *suâ sponte*, so she was admitted into the hospital. Liq. Ferri Perchlor. was applied to the ulceration, and an ergot and iron mixture given internally. No more hæmorrhage occurred; the vagina was daily syringed out with chloralum lotion.

The patient's general condition having improved, I proposed extirpation of the uterus, and both she and her husband agreed to its performance.

This was done on February 26th, the steps of the operation being precisely similar to those of the previous case, but when the uterus had been freed from the bladder in front, and an attempt made to drag it down with the clamp forceps, it was found that the disease had extended into the fundus, rendering it so friable that it tore into pieces when traction was made; this of course rendered the operation much more difficult and prolonged, and constant free oozing went on from the lacerated surfaces until the broad ligaments were tied; this was done as speedily as possible and the uterus removed. There was no further oozing, but the patient was collapsed, and, in fact, her pulse became very feeble from the moment the peritoneal cavity was opened. No drainage-tube was inserted into the vagina, which was freely dusted over with iodoform. Half an ounce of blood-stained urine was drawn off. Brandy and ether were administered hypo-

dermically, but the patient never rallied and death took place twelve hours later.

Autopsy.—Abdomen only examined. Slight extravasation of blood into the anterior abdominal wall; intestines in pelvic cavity injected and showing commencing peritonitis; uterus has been removed at its junction with the broad ligaments, on which are ligatures. Fallopian tubes, ovaries, and pelvic glands normal. On opening the bladder its mucous membrane was seen to be deeply injected, with extravasations of blood into its muscular coats. Ureters were intact.

Microscopical examination of the diseased uteri in both the cases recorded showed the characteristic structure of epithelioma.

Remarks.

A. *Comparison of methods of operating.*

Extirpation of the entire uterus through the abdominal wall was first recommended by Guthberlet in the year 1814, and Langenbeck operated unsuccessfully after this method eleven years later (1825). Von Sanuter removed a cancerous uterus per vaginam in 1822, as did also Blundell in 1828 and Recamier in 1829, both patients recovering. Although Delpech in 1830 recommended a combination of the abdominal and vaginal methods, the operation of total extirpation fell into disrepute until 1878, when it was revived by Freund, and since then it has been performed many times. The various methods of operating are, then:

(*a*) Abdominal.

(*b*) Vaginal.

(*c*) A combination of the two.

Practically we may ignore the third (which has seldom been done, although Corradi (1)* of Florence and others forcibly recommend it), and need only compare the abdominal and vaginal methods, each of which has certain advantages and disadvantages.

* The numbers apply to the list of references at the end of paper.

In the *abdominal* operation the uterus is easier of access, the vessels can be controlled better, the bladder and ureters more easily avoided, the uterus removed even where considerable adhesions exist, and the pelvic glands, if enlarged, can be (as Freund advises) removed, added to which, after the removal of the uterus the opening into the vagina can be carefully closed, the peritoneum thoroughly cleansed and maintained aseptic; but, on the other hand, by this method the peritoneum and intestines may be seriously injured and cooled by prolonged exposure, and if the patient be very stout the operation will be extremely difficult, and perhaps impossible.

In the *vaginal* operation the peritoneum and intestines are not exposed as in the other method, but its disadvantages are:

(*a*) The small space to work in.

(*b*) The great difficulty in securing vessels should there be bleeding.

(*c*) The great liability to injure the bladder and ureters.

(*d*) The impossibility of rendering the peritoneum and wound aseptic.

The essentials for the vaginal operation are that the passage be capacious, or at all events capable of dilatation, and that the uterus be freely moveable and not much enlarged; if it be already in a condition of retroflexion the operation is thereby rendered much easier.

With regard to the comparative difficulty of the two methods, that by the vagina is generally considered the more easy of performance; much, however, depends on the existent conditions in each individual case. In the two I have recorded the operation was rendered extremely difficult; in the first case, by the inability to thoroughly draw down the uterus (owing to the previous cellulitis), and in the second, by the friable condition of the uterine tissue.

Operators will, however, not be guided in their choice by a consideration of the difficulties to be encountered in either of the methods, but will undoubtedly choose that

which promises the greater probability of a favorable result to the patient. In order to decide this point I subjoin the following tables, which, I think, give a fairly complete list of all the operations performed by each method, either in this country or abroad, and I would express my thanks to numerous correspondents who have so kindly and promptly answered my inquiries.

Abdominal Extirpation.

References.	Operator.	No. of cases.	Recovered.	Died.
2	Ahlfeld	2	—	2
3	Alexander	1	—	1
5	d'Antona	1	—	1
9	Bantock (G.)	1	—	1
10	Bardenheur	12	9	3
8	Baum	4	2	2
2	Baumgartner	1	—	1
3	Billroth	8	3	5
11	Bottini	1	—	1
12	Brandel	1	1	—
2	Crede (B.)	2	—	2
13	Czerny	2	—	2
2	Delhaes	1	—	1
17	Emmett	1	—	1
2	Frankenhauser	1	—	1
2	Freund	14	5	9
2	Fritzsch	1	—	1
43	Garden	1	—	1
18	Golding-Bird	1	—	1
19	Gonner	1	—	1
2	v. Grunewald	1	—	1
3	Gussenbauer	1	—	1
10	Hegar	2	—	2
20	Helmuth	1	—	1
61	Jackson	1	—	1
60	Janvrin	1	—	1
2	Jaquet	1	—	1
43	Keith	3	3	—
63	Kispert	1	—	1
62	Kleinwachter	1	—	1
84	Kocher	1	1	—
2	Kochs	2	1	1
64	Krabbel	1	—	1
65	Kuhn	2	1	1
67	Lane	1	1	—
66	Lange	1	1	—

References.	Operator.	No. of cases.	Recovered.	Died.
2	Langenbuch	1	—	1
2	Leopold	1	—	1
2	Lowenstein	2	—	2
49	Mac Cormac (Sir W.)	1	1	—
68	Marcacci	1	—	1
40	Martin (A.)	6	—	6
2	Martini	2	1	1
2	Massari	1	—	1
49	Morris (Henry)	2	—	2
2	Muller	2	—	2
2	Oelschlager	1	—	1
2	Olshausen	2	1	1
2	Pernice	1	—	1
69	Pietrizikowski	2	—	2
2	Reyher	1	—	1
70	Rubio (F.)	1	—	1
10	Rydygier	1	—	1
43	Savage	1	—	1
2	Schadel	1	—	1
2	Schede	2	—	2
3	Schramm	1	—	1
45	Schroeder	8	3	5
2	Shepherd-Haslewood	1	—	1
49	Smith (Heywood)	1	—	1
71	Solovieff	1	—	1
72	Spiegelberg	6	2	4
43	Tay (Waren)	1	—	1
9	Thornton (Knowsley)	1	—	1
2	Tillmans	1	—	1
2	Viet	1	1	—
73	Warren	1	—	1
74	Wells (Sir Spencer)	1	1	—
55	Willett	1	—	1
43	Williams (John)	1	—	1
75	Wylie	1	—	1
	Total	137	38	99

Vaginal Extirpation.

2	Ahlfeld	2	1	1
4	Anderson	1	1	—
9	Bantock (G.)	1	—	1
7	Bardenheur	1	—	1
8	Baum	4	2	2
6	Bernays	1	1	—
3	Billroth	12	8	4
14	Boekel (Jules)	1	1	—

References.	Operator.	No. of cases.	Recovered.	Died.
26	Bolling	1	1	—
11	Bompiani	1	—	1
11	Bottini	3	3	—
15	Breisky	1	1	—
16	Brunner	10	7	3
27	Bull	1	1	—
22	Burke	1	1	—
23	Calderini	1	—	1
24	Caselli	1	—	1
1	Cole (B.)	2	2	—
25	Cushing	1	1	—
13	Czerny	11	8	3
21	Demons	4	2	2
21	Dudon	2	1	1
—	Duncan (William)	2	1	1
49	Edis (A. W.)	1	—	1
58	Engstrom (O.)	2	1	1
28	Esmarch	2	1	1
25	Fenger	1	1	—
29	Foreman	1	1	—
30	Freund	2	1	1
31	Hahn	7	5	2
33	Helferich	1	1	—
43 and 79	Hofmeier	9	8	1
32	Howitz	2	2	—
10	Kaltenbach	1	1	—
37	Kehrer	1	—	1
48	Keith	1	1	—
34	Kocher	1	1	—
38	Kottman	1	1	—
35	Kraussold	2	2	—
36	Kufferath	1	1	—
39	Johannovsky	1	1	—
59	Mac Cormack	1	1	—
49	Malins	1	—	1
21	Mandrillon	1	1	—
40	Martin	60	47	13
41	Netzel	1	—	1
43	Ogston (A.)	2	1	1
42	Olshausen	25	18	7
49	Purcell	1	1	—
44	Sanger	2	1	1
44	Sanger (Leipzig)	2	2	—
44	Schatz	10	7	3
10	Schede	2	—	2
51	Schramm	3	3	—
45	Schroeder	27	19	8
46	Simpson (A. R.)	1	—	1
47	Solowiew	1	1	—
48	Starck	1	1	—
50	Stewart	1	1	—
25	Tarsini	1	1	—

References.	Operator.	No. of cases.	Recovered.	Died.
80	Tauffer	5	4	1
52	v. Teuffel	7	4	3
53	Thiersch	6	5	1
9	Thornton (Knowsley).....	1	—	1
54	Viet	2	2	—
56	Wallace (John)	3	2	1
55	Willett..... ..	1	—	1
43	Williams (John)	3	1	2
57	Zweifel	3	2	1
	Total	276	197	79

So that there were 137 cases of *abdominal* extirpation with 99 deaths (being a death-rate of 72 per cent.), whereas of 276 cases of *vaginal* extirpation there were 79 deaths (being a death-rate of 28·6 per cent.).

B. *Details of Vaginal Operation.*

If, then, it be decided to extirpate the entire uterus, it is evident from the foregoing statistics that (unless there be some special contra-indication) the vaginal method should be adopted, and after the manner which Schroeder advises. There are, however, some points on which I should like to make a few remarks :

(*a*) Instead of tying the broad ligaments on either side with silk, it has been proposed by Sir Spencer Wells(74) that long-handled pressure forceps should be placed on them, and, after the uterus is removed, allowed to remain on until all fear of bleeding be past; by this means it is considered that there is less risk of septic infection, that the forceps help to bring the edges of the wound together and at the same time promote drainage. Now, whilst this plan may be advisable in some cases where (as in mine) there is great difficulty in passing ligatures, I think it is far safer to secure the ligaments as recommended by

Schroeder and to allow the ligatures to separate in the ordinary manner, for there can be no difficulty (as I found) in keeping them aseptic by means of iodoform, whilst the forceps, instead of bringing the edges together, would have a precisely opposite effect.

(*b*) With regard to the open wound left after removing the uterus, some operators stitch the edges together with a view to shut off, as far as possible, the peritoneal cavity, and to prevent prolapse of the intestines; and, in order to obviate the latter possible complication, Bardenheur (7) has even proposed the use of a network. But these are quite unnecessary and, to my mind, prejudicial, for what happens is this: "the bladder, even when empty, falls down on to the posterior vaginal wall and contracts adhesions with it, thus shutting off the peritoneal cavity." There is danger, whilst stitching, of including the ureters, and in support of this Schatz, of Rostock (44), mentions a very interesting case where the patient was seized with severe pain in the hypogastrium, became delirious, and died. At the post-mortem examination it was found that one ureter was pierced by a stitch, and there was an abscess in the psoas muscle on the corresponding side. He thinks death was due to iodoform poisoning, but on reading the case its gives one the impression of being more likely the result of uræmic toxæmia.

(*c*) The after-treatment is very important; it appears to me that it is both unnecessary and harmful either to pass a drainage-tube into Douglas's pouch or to plug the vagina, because by either of these means we separate the edges of the wound and prevent the bladder from falling down on to the posterior vaginal wall, added to which, a drainage-tube is apt to cause adhesions to the intestines. The drainage-tube used in my first case was double for the purpose of irrigation, but on very gently attempting this, with a warm Condy's solution, the patient suffered severe abdominal pain and became somewhat collapsed (after the use of only a couple of ounces of fluid), so that I did not dare to repeat it, and the tube

fell out on the fourth day. Professor Martin, of Berlin (43), tells me that he lost a patient from collapse after irrigation. If I were to again perform this operation my treatment would be somewhat as follows:—"Having removed the uterus, I should freely dust iodoform over the whole of the cut surfaces, the ends of the ligated broad ligaments and the long ligatures hanging from them; I should then place one iodoform plug just within the vulva and renew this twice daily after irrigating the vagina only with an antiseptic solution. I should keep the patient well propped up in bed, as by this means the pressure of the intestines on the bladder will help to keep the wound closed and also facilitate the escape of any exuded fluid into the vagina. For the first ten days, maintaining this posture and keeping the patient well under the influence of opium, seem to me to be points of great importance.

(*d*) In reference to my successful case, it was unfortunate that the patient developed an attack of cellulitis soon after being seen in the out-patient room, as before she was deemed in a fit condition for operation, not only had the disease made rapid strides, but also the broad ligaments were much shortened; on the other hand, the complete absence of pelvic inflammation subsequent to the operation, was very probably due, in great measure, to the altered condition of the peritoneum; for it is well known that this structure is much less prone to take on inflammatory action when it has previously been inflamed, than it is when in a virgin state. Respecting the woman's condition when readmitted (and during her stay in the hospital), the continued high temperature with the physical signs in the thorax, made one diagnose secondary infiltration of lungs with malignant disease; this, however, on post-mortem examination, proved not to be the case.

(*e*) With regard to the advisability of removing the Fallopian tubes and ovaries as well as the uterus, opinions are divided; some operators deeming it essential to do so, in order not only to make more secure against recurrence of the disease in them, but also to put a stop to the

monthly molimina, and to avoid the risk of peritonitis as a result of congestion of, or hæmorrhage from, the ovaries at periodical intervals; whilst others consider that by this procedure more risk is run (owing to the shortness of the pedicle) of the ligatures slipping and causing fatal hæmorrhage. It appears to me that we must be guided by the facility or otherwise with which we can apply ligatures, for if we can safely remove the tubes and ovaries it is clearly better to do so, for the reasons just stated, and that the risk incurred from the recurring ovarian activity is not imaginary, is proved, I think, by my first case, for the patient suffered from three attacks of pain and tenderness over the left ovarian region, each attack corresponding to what should have been a menstrual period, so I concluded that she had hyperæmia of that ovary, resulting in ovulation, and possibly some extravasation of blood and localised peritonitis, which latter (seeing that there was no further recurrence) resulted in adhesions and probably cirrhosis of that ovary. But why, if this deduction holds ground, the right side was not affected either at the same time, or alternately with the left, I am at a loss to answer. At the post-mortem examination there was seen to be marked cirrhosis of the left ovary, but whether that was caused by the pressure of the new growth or previously it is impossible to say. It is remarkable that after a careful search no trace of the right ovary was found.

In Sir William Mac Cormac's patient a precisely similar thing occurred at a date corresponding with that in which (in the natural course of events) she should have been menstruating.

c. *Indications and contra-indications to the operation.*

The diseases for which it has been performed may be classed as follows.

I. *Non-Malignant*
1. Myo-fibromata.
2. Hæmorrhagic endometritis.
3. Prolapsus uteri.

II. *Malignant* . . { 4. Sarcoma. / 5. Carcinoma. { *a*. Scirrhus. / *b*. Encephaloid. / *c*. Epithelioma.

In none of the non-malignant affections can the operation (in my opinion) ever be justifiable.

(1) *Myo-fibromatous tumours* can be much more safely removed by the ordinary method of hysterectomy in which more or less of the cervix is left and the peritoneal cavity shut off altogether from the air. Keith (40), of Edinburgh, in three of his cases of hysterectomy for this disease found after removing the mass that he had placed the clamp on the top of the vagina *below* the cervix uteri, and thus performed extirpation of the entire uterus though not by the ordinary abdominal method; still I have added these cases to the list of abdominal extirpations.

(2) For *recurrent hæmorrhagic endometritis*, Prof. Martin removed the uterus per vaginam four times with one death, but I imagine few will feel inclined to follow his example by adopting such heroic treatment for this disease.

(3) For *prolapsus uteri* the same operator informs me that when all other means failed, he removed the entire uterus three times with no fatal result. Sanger, of Leipzig (44), records six cases, with two deaths, and Malins, of Birmingham, quite recently reported to this Society a fatal case. Now, the cases of prolapsus uteri must be very few indeed where we are unable to cure, or, at all events, greatly alleviate by one or other of the well-known plastic procedures, or by Alexander's operation on the round ligaments; but when such a case did occur, would it not be safer to push up the prolapsed organ, then open the abdomen and stitch the uterus to the abdominal wall, or perform hysterectomy as for myo-fibromata? At all events, it is certainly quite unjustifiable to entertain the idea of complete extirpation before, at least, all other means of cure have proved futile.

(4) *Sarcoma uteri* is a comparatively rare disease. According to Hart and Barbour (76) there are only about

seventy-five recorded cases. When diagnosed by the uterine enlargement, hæmorrhage, watery non-offensive discharge, and by microscopical examination of portions removed by the curette, the proper treatment is removal of the entire uterus, as its malignancy differs in no perceptible degree from that of carcinoma.

Martin tells me he has operated twice successfully.

(5) By far the greater number of extirpations of the entire uterus have been the subject of cancer. Now, cancer affects the uterus in various ways. Ruge and Veit (78) in their most valuable and exhaustive work on this subject ('Der Krebs der Gebärmutter') say that it commences in either of the following ways :

(*a*) Body of the uterus.
(*b*) Mucous membrane of cervical canal.
(*c*) Wall of the cervix proper.
(*d*) Portio vaginalis.

In each variety the disease spreads in a definite direction, and this (as we shall see presently) has a most important bearing on determining what operative procedure is best.

With regard to the comparative frequency of uterine cancer, Hofmeier, of Vienna (79), gives the following statistics : Of 26,200 women examined by Prof. Schroeder, 812, or 3 per cent., had cancer of the uterus ; in 236 of these the *portio vaginalis* was attacked, in 181 the *mucous membrane of the cervical canal,* in 28 the *body of the uterus,* and in 367 the place of origin was *undetermined.*

It will be seen that none are given as originating in the wall of the cervix proper, and the reason of this is the great difficulty to diagnose it early, for the growth commences as tubercles in the substance of the neck, which either grow outwards on to the surface of the portio vaginalis, or inwards to the canal and then ulcerate. The subsequent progress is the same as that of the part (canal or vaginal portion) on which it first appears, so that, for operative purposes, we need only consider cancer

as it affects the body, mucous membrane of the cervix, or the portio vaginalis.

Cancer of the body of the uterus constitutes about 3½ per cent. of all the cases, and is, obviously, the most suitable kind for treatment by extirpation, as the disease may remain localised a long time in this organ with its thick walls; when, however, it has spread far over the cervix, or into the broad ligaments, then there is little chance of a lasting result from any operation; hence the great importance of making an early diagnosis from the pain, hæmorrhage, offensive discharge, and emaciation, but, above all, by the examination microscopically of small portions removed by the curette, the value of which, *in all cases of uterine disease*, I feel it impossible to overrate. But with regard to "cancer of the neck of the womb," the case is very different; the vast majority of women suffering from uterine cancer are (as seen from the foregoing statistics) attacked by the disease in this form. Now, these are the cases about the treatment of which there is such a divergence of opinion: shall we remove the whole organ, or shall we merely perform amputation of the cervix? We must, I think, answer this question somewhat as follows: "If we can promise our patient that, by removing the entire uterus, the danger of recurrence of the disease will be so very much less than after amputation of the cervix, that it more than counterbalances the far greater immediate risks incurred, then and then only are we justified in having recourse to it." Now, in order to determine whether we can give such a promise, we must first know in what direction the disease extends, and then compare the immediate and ultimate results after the two operations respectively. According to Ruge and Veit, *cancer of the portio vaginalis* has a very slight tendency indeed to spread into the cervix, but almost invariably spreads out *laterally* into the fornices of the vagina and the ligaments. What possible advantage then, I would ask, can be expected in these cases by removing the uterine body (which is unaffected) over that

gained by supra-vaginal amputation which gets rid (as far as the uterus is concerned) of the disease? On the other hand, *cancer of the mucous membrane of the cervical canal* spreads up along the canal and into the uterus, whilst it only at a late period (or even not at all) attacks the os uteri.

Now, with regard to the comparative death-rate we have seen that after vaginal extirpation it is 28 per cent.; whereas after supra-vaginal amputation of the cervix it is, according to Hofmeier, nearly 8 per cent.; and Pawlik (77) had a mortality of only 7¼ per cent. after amputation of the cervix with the galvano-cautery in 136 cases.

In respect of the *ultimate result*, it is, unfortunately, impossible to obtain it in all the successful cases of vaginal extirpation, because some patients do not take the trouble to report themselves afterwards, and others (when a recurrence takes place) seek advice elsewhere; however, through the kindness of Professor Martin, I am able to give the results of his operations. There were 60 cases of total extirpation, 38 of which were done for carcinoma; of these latter 27 recovered from the operation, but only 8 (or 30 per cent.) were free from recurrence one year after.

On the other hand, of Pawlik's 136 cases of amputation of the cancerous cervix 126 recovered from the operation and 33 (or over 26 per cent.) were free from recurrence after the same length of time, as may be seen from the following list:

1	was	alive	19	years	after operation.
2	were	„	12	„	„
3	„	„	8	„	„
3	„	„	7	„	„
3	„	„	5	„	„
2	„	„	4	„	„
5	„	„	3	„	„
7	„	„	2	„	„
7	„	„	1	„	„
33					

So that whilst extirpation was four times more fatal than amputation, the ultimate result was only slightly more favorable after the more dangerous operation (30 per cent. compared with 26¼ per cent.).

Hofmeier gives statistics of 12 cases of vaginal extirpation and 52 cases of vaginal and supra-vaginal amputation in which the *immediate* result of the latter was not quite so good, being three instead of four times less fatal; but the ultimate result was much better, seeing that the number of cases free from recurrence *two* years later was precisely alike after either operation (viz. 33 per cent.). But if such good results be obtained by performing supra-vaginal amputation of the cervix, may we not reasonably expect and hope to obtain much better results by applying either chloride of zinc paste or the thermo-cautery to the *stump?* Hofmeier gives particulars of 13 cases treated by amputation followed by the hot iron, of which only 7·7 per cent. died from the operation, and 42 per cent. were well and free from recurrence two years later.

Seeing then, what a comparatively safe operation supra-vaginal amputation of the cervix is, how often it is followed by long immunity from recurrence of the disease, and how impossible it is (even when the disease appears strictly limited to the cervix) to be certain that the parametrium or even the pelvic glands be not already implicated, is it not our bounden duty to discountenance extirpation of the entire uterus for carcinoma of the portio vaginalis? For my own part I shall never again perform the operation for malignant disease commencing in this part of the uterus. The advocates of extirpation liken the opposition to it to that with which ovariotomy was at first received, but the two operations are totally dissimilar; in ovariotomy the tumour is usually a benign one, the treatment by complete removal is in most cases the safest, and if the patient recover she has every prospect of living for many years, and even being able to procreate. Whereas, in extirpation of the uterus *for malignant disease* (the only condition, as I hope I have proved, for which it may even be con-

templated) this operation is in the majority of cases certainly not the safest, and the outlook after it, with respect to prolonging the patient's life and making it one of comfort and usefulness, is indeed dismal. Weighing all these facts, dispassionately and unbiassed, I would urge, in conclusion, the paramount importance in all cases of doubtful uterine disease, of making an early examination with the curette and microscope, and if cancer be detected in the body of the uterus or in the mucous membrane of the cervix then extirpation may be resorted to with a reasonable prospect of prolonging life, and as no other procedure is possible; but in *all cases* of cancer affecting the portio vaginalis, and *à fortiori* when there is the least implication of the vaginal walls, it appears to me to be an unjustifiable proceeding for us to subject our patients to the immense immediate risks which total ablation of the uterus entails, when we can positively gain quite as good ultimate results from an operation (*i. e.* supra-vaginal amputation) the *immediate* risks to life from which are four times less.

List of authorities consulted and referred to in the paper.

1. Trans. Internat. Med. Congress, 1881, vol. 4, p. 325.
2. Deutsche medicinische Wochenschrift, 1880, i, p. 27.
3. Wiener medicinische Presse, 1881, xxii, p. 107.
4. American Journ. of Obstet., April, 1882.
5. Movimento Napoli, 1882, iii, p. 385.
6. St. Louis Med. and Surg. Journ., 1884, xlvi, p. 369.
7. Berl. klin. Wochenschrift, 1881, No. 35.
8. Berl. klin. Woch., 1880, No. 46.
9. Obstet. Trans., London, 1883, vol. xxv.
10. Operative Gynäkologie, Hegar and Kaltenbach, p. 408.
11. Centralb. für Chirurgie, 1882, No. 13; also Hegar and Kaltenbach, Op. Gynäkologie.
12. Centralb. für Gynäkol., 1883, vii, p. 697—700.
13. Berl. klin. Wochenschrift, 1882, No. 46.
14. Lancet, 1884, June 28, p. 1262.

15. Präger med. Wochenschrift, 1883, No 41.
16. Centralb. für Gynäkol., 1884, No. 24, p. 379.
17. Americ. Journ. of Obstet., New York, 1882, No. 15, 226.
18. Trans. Clin. Soc., Lond., 1882-3, xvi, 28—33.
19. Zeitschrift für Geburtshulfe, etc., Band x, Heft i.
20. Amer. Journ. of Obstet., 1882, p. 599.
21. Journ. des Accouchements et Rev. de Med. et Chir. Prat., 1884, Sept. 30, p. 238.
22. Med. Record. N. Y., 1882, xxii, 644.
23. Annali di Obstet. Ginecologia, E. Rediatria.
24. Centralb. für Gynäkol., 1882, No. 5.
25. Amer. Journ. of Med. Sc., April, 1882.
26. Upsala Latrap. Forh., 1883, xviii, p. 107.
27. Amer. Journ., N. Y., 1884, No. 39, p. 371.
28. Centralb. für Chirurg., 1882, No. 5.
29. Australas. Med. Gaz., Sydney, 1883-4, No. 3, pp. 143—145.
30. Private letter, Strassburg, May 3, 1884.
31. Berl. klin. Wochenschrift, 1882, No. 37.
32. Gynækologiske og Obstet. Meddelelser, 1882, No. 4, p. 122.
33. Schmidt's Jahrbr., Band xix, S. 152.
34. Revue médicale de la Suisse Romande, 1881, No. 11.
35. Centralb. für Gynäkol., 1882, No. 2.
36. Journ. de Med. Chirurg. et Pharmacol., Bruxelles, 1884, No. 78.
37. Beitr. zur. klin. und experimentalen Geburtskunde, Giessen, 1879.
38. Schweizer Correspondenzbl., 1882, No. 1.
39. Centralb. für Gynäkol., 1884, v, p. 79.
40. Berl. klin. Woch., 1881, No. 19, and Private Letter, April 12, 1884.
41. Centralb. für Gynäkol., 1884, vi, p. 95.
42. Berl. klin. Woch., 1881, Nos. 35 and 36.
43. Private letter.
44. Archiv für Gynäkol., Band xxi.
45. Private Letter, Berlin, March 4, 1884.

46. Amer. Journ. Obstet. Suppl., Nov., 1882.
47. Centralb. für Gynäkol., 1882, No. 38.
48. Berl. klin. Wochenschrift, 1882, No. xii.
49. Personal communication.
50. Trans. Illinois Med. Soc., Chicago, xxxiii, pp. 192—197.
51. Przegl. lek. Krakow, 1883, No. xxii, pp. 185, 217, 229.
52. S. die Beitr. Krankengeschichten.
53. Vortrag. med. Gesselschaft, Feb., 1883.
54. Deutsche medicinische Wochenschrift, 1883, No. 1.
55. St. Bartholomew's Hosp. Reports, 1883.
56. Paper read at Annual Meeting of Brit. Med. Assoc., Belfast, 1884.
57. Centralb. für Gynäkol., 1884, No. 26, p. 401.
58. Archiv. de tocol. des malad. des femmes, Août, 1884, p. 639.
59. Centralb. für Gynäkol., 1882, No. 11.
60. New York Med. Journ., vol. xxxvii, p. 152.
61. West M. Reporter, Chicago, 1882, vol. iv, pp. 129—134.
62. Weiner med. Presse, 1881, xxii, pp. 72, 105.
63. Centralb f. Gynäkol., 1882, vi, p. 769.
64. Centralb f. Gynäkol., iv, p. 421.
65. Centralb f. Gynäkol., iv, p. 217.
66. Med. Rec. N. Y., 1882, xxi, p. 357.
67. Pacific Med. and Surg., Journal, April, 1880.
68. Gaz. di Osp. Milano, 1883, iv, pp. 483—491.
69. Prager med. Wochenschrift, 1881, vi, p. 235.
70. Centralb. f. Gynäkol., 1882, vi, p. 769.
71. Archives de tocol., Paris, 1880, vii, pp. 1—3.
72. Archiv f. Gynäkol., Berl., 1880, xvi, p. 124.
73. Brit. Med. Journal, August 27, 1881, p. 370.
74. Medico-Chirurg. Trans., London, vol. 65.
75. Amer. Journ. Obstet., N. Y., 1883, xvi, pp. 527—530.
76. Manual of Gynæekology, Hart and Barbour, 1882.
77. Zur Trage Behandlung der Uterus Carcinom, Wiener Klinik, 1882.

78. Der Krebs der Gebarmutter, Von Ruge und Veit, Stuttgart, 1881.
79. Zeitschrift für Geburtshülfe und Gynäkologie, Band x, Heft ii, Seite 269.
80. Archiv für Gynäkologie, Band xxiii, S. 3, 1884.

The PRESIDENT said he was certain he was but expressing the general feeling of the Society in thanking Dr. Duncan very sincerely not only for the able and interesting paper he had read on a subject of the first importance, but also for his kindness in having the tables of statistics printed for the use of the Fellows on the present occasion. In the discussion it would be interesting to hear from Fellows and visitors their personal experience of the operation; and also the opinion of those who had studied the pathology of carcinoma as to the soundness of the views of Ruge and Veit, and the bearing of the pathology of the disease upon the justifiability of the operation generally.

Dr. BRAXTON HICKS, after thanking the author for his excellent paper, offered a word of caution in regard to the accepting the appearance of the material brought down by the curette as absolute proof of malignant disease, at least in cases occurring in the childbearing period; for under the microscope the mucous membrane elements of the uterus, influenced by pregnancy or other stimulants, possess a character extremely like to, if not identical with, those of malignant disease; and in the case of sarcomatous polypi, which may even return and yet ultimately cease, their aspect is so like that of recurrent sarcoma of malignant nature as to be indistinguishable from one another.

After some remarks from Sir WILLIAM MAC CORMAC,

Dr. JOHN WILLIAMS said that he felt indebted to Dr. William Duncan for his valuable paper. The operations for the total extirpation of the uterus for cancer had now been before the profession for several years, and had been practised in a large number of cases, and he thought that we were in a position to form a just opinion of the comparative severity at least of the abdominal and vaginal methods of operating. The mortality from the abdominal method proved to be so great—72 per cent.—and it presented no advantage over the vaginal as regards recurrence, that it had been discarded. Such, however, cannot be said of the vaginal method. The mortality after this method was from 25 to 34 per cent. Dr. William Duncan estimated at 28 per cent. This is little above the mortality of ovariotomy for many years after it had become a recognised operation, and it is not impossible that this may be still considerably reduced. But ovariotomy was a very different operation from that for total extirpation of the

uterus for cancer. If the patient recovered from ovariotomy she was restored to health and strength, physical and social activity, and remained so in so far as the disease for which the ovariotomy was done was concerned. It was not so with the patient who had passed successfully through the dangers of total extirpation of the uterus for cancer. The disease recurred in a large number of cases within six months, in others within twelve months, while very few remained free from it for two years, and only one patient remained well five years after the operation. These facts, together with the additional ones that most of the cases operated upon were cases in which the cervix and not the body of the uterus was the part affected, and that supra-vaginal amputation of the cervix, an operation far less fatal than total extirpation, had produced better results, must at least limit the field of total extirpation to cases in which the body of the uterus is clearly affected. Here, however, a difficulty arises—one of diagnosis. Dr. Williams had done the operation four times, and the only patient of the four who recovered from it died in a month, exhausted by a fæcal fistula high up in the small intestine. In this case the patient had been examined under ether before the operation was decided upon; the uterus was found freely moveable, very slightly enlarged. No growth could be discovered in the pelvis and no adhesions between the uterus and the neighbouring organs, but at the operation a soft adhesion was found between the fundus and a coil of small intestine. The disease had passed through the uterus wall to the small intestine, and three or four days after the operation liquid fæces passed by the vagina. Here, every care had been taken to discover extension of the disease beyond the uterus, but without avail. Further, before it is possible to form a just opinion with regard to total extirpation of the uterus for cancer, by whatever method, the course and history of cancer of the body must be studied and become better known. It was supposed to be an extremely rare disease. It was now known to be far more common than was at one time thought; the means for recognising it had only recently come into practice, and there were reasons for believing that the duration of cancer of the body of the uterus was longer than was at one time believed. Moreover, during the early stages of cancer the pain was not severe, it became so only after the disease had invaded the deeper tissues. Now, when recurrence took place after operation the disease was placed at an enormous advantage. It recurred at the edge of the cicatrix and at once attacked the deeper tissues, and was associated with the severe suffering of the advanced stage of cancer; that meant that after the operation the patient had a few weeks or months of comfort and supposed freedom from disease and then the disease returned and occupied the position it would have occupied after months of compara-

tively little suffering had it followed its course unmolested, for the tissues through which it would have had to make its way had been removed by the surgeon's knife.

Mr. KNOWSLEY THORNTON was very glad to find that, after his very careful and exhaustive examination of the subject, Dr. William Duncan had arrived at the conclusions which he had expressed in his paper with regard to total extirpation of the uterus for cancer. The last speaker, Dr. John Williams, had so fully expressed the views which Mr. Thornton had intended to put forth, and with evidence of a wider knowledge of the subject than he could lay claim to, that he really had very little left to say, but he thought that an important subject of this kind should be discussed thoroughly and from different standpoints, and he would therefore make a few observations. In considering the matter the first thing to be done was to question whether, with our present knowledge of cancer, operations were ever justifiable for it in any situation. To this he would personally reply that if the diseased organ could be thoroughly exposed and isolated, and diseased glands, if present, also be removed, he would advocate operation, and as an example he would refer to amputation of the cancerous mamma with thorough removal of axillary glands. Here an organ had to be dealt with which could be thoroughly exposed and the glands followed up and removed. He had been well satisfied with his results in mammary operations for cancer, and gave a more hopeful prognosis from his own experience than many surgeons seemed inclined to give. This he merely brought forward to show that he was not an opponent of all operations for cancer, but he would limit them to parts which could be thoroughly dealt with. The situation and surroundings of the uterus were most favorable for the spread of the cancerous elements into tissues beyond the reach of complete removal, and he thought that very likely the attack of cellulitis in Dr. Duncan's first case was due to displacement of cancerous elements into the left broad ligament during his examination of the case in the out-patient room, and that the same infection of this loose cellular tissue might account for the speedy pelvic recurrence after an apparently successful operation. This would lead to the one point in which he must differ from the author of the paper. He believed that the practice of curetting malignant disease of the uterus was a very bad and dangerous one, and likely to lead to greater rapidity in the progress of the case from the diffusion of the elements. Going back from this digression to the question of the position of the uterus as an organ suitable for complete extirpation when attacked with cancer, he must express a strong opinion that it was most unsuitable; he had thought that some special circumstances might justify the operation, especially intolerable pain in the earlier stages, but after

what Dr. Williams had told the Society about the pain in recurrence, even this class of cases were no longer to be operated upon. Passing from these general questions we had to consider, as Dr. Duncan had so fully done in his paper, the different kinds and seats of uterine cancer. Cancer of the body had been shown to be both rare and slow in growth, it was also in his experience rarely painful so long as it was confined to the body, and the discharges might be kept fairly sweet by insufflation of iodoform and by means of some of the ingenious instruments lately introduced into practice. With regard to the forms of the disease attacking the cervix he thought extirpation altogether unjustifiable in the face of the results which could be obtained by amputation of the cervix by scissors, knife, or écraseur, and application of chloride of zinc (Marion Sims's method). He preferred this method to the surgically neater methods of complete amputation of the cervix introduced by the German school, because the chloride of zinc appeared to have a special power of following up and destroying the cancer elements in the cellular tissue, and was thus far more likely to give lasting results than clean flap cutting with the knife. It was not necessary for him to add anything to what Dr. Williams had said as to probable length of life if left alone and if successfully operated upon, for he thoroughly agreed with him. In the face of the frightful mortality shown by Dr. Duncan's table in the abdominal operation, he should think no one would dare to recommend it in the future; and with regard to the results by the vaginal method, the mortality was altogether out of proportion to the cures, especially when the speedy recurrence in the great majority of cases was considered. In pointing out the advantages and disadvantages of the abdominal and vaginal methods, Dr Duncan had, however, left out the most important objection to the vaginal method, viz. that the tubes were not thoroughly removed. They are directly continuous in structure with the uterus, and any operation which leaves them behind must be in the worst sense a partial operation. Dr. Duncan had referred to the question of leaving tubes and ovaries in its bearing on subsequent menstruation but not with regard to this far more important question of the continuity of structure with the diseased uterus. This condemned the vaginal operation as completely as the heavy deathrate condemned the more perfect abdominal one.

Mr. ALBAN DORAN believed that operations for the complete removal of a cancerous uterus were not justifiable from an anatomical and pathological point of view. He referred to the recent researches of Mierzewsky and Lebu on the lymphatics of the female pelvic organs. In the connective tissue between the body of the uterus and the peritoneum which invested it was a very dense network of lymphatics, whilst two wider lymphatic

plexuses formed a kind of collar around the uterine and the vaginal part of the cervix. The lower of these two plexuses, which surrounded the cervix next the os externum, communicated very intimately with the vaginal lymphatics. All these networks of lymphatic vessels communicated freely with each other and emptied their contents into two or three large trunks, which ran to the obturator gland, passing along the lower border of the broad ligament. He had found that this gland soon enlarged from irritation in cases of cancer of the uterus, but the true stony hardness as so frequently observed in the axillary glands and in patients suffering from carcinoma of the mamma, was rare, so that he had not detected it except in a few advanced cases where the uterus was already fixed in the pelvis and deeply ulcerated. The disposition of the uterine lymphatics, however, favoured a rapid extension of cancerous elements into neighbouring structures, which was preceded, as in cancer of other organs, by inflammatory hardening passing into the more marked malignant induration by insensible gradations. In either the vaginal or the abdominal operation it was impossible to remove all the broad ligament, so that some of its tissue, containing infected lymphatics and probably infiltrated with cancer cells, was always left behind.

Dr. PLAYFAIR said that everyone must have been struck by the judicial spirit which characterised Dr. Duncan's excellent paper, and it was to be regretted that the decision which he had come to was one which must commend itself to all who had carefully studied the facts connected with this operation. When it was first proposed some years since he was much struck with it as a possible resource, and as a means of arresting the deadly termination of this terrible disease. He was soon convinced, however, that the hope was fallacious, and that extirpation of the uterus could never be considered a good practical operation. The reasons for this were that in the most common form of malignant disease, in which it was most likely to be of value, the diagnosis was too uncertain until the case had arrived at a stage when the operation was hopeless. Every practical gynæcologist knew that fixation of the uterus was one of the most reliable signs of malignancy. Putting aside epithelioma, the malignant nature of changes in the cervix must always be more or less uncertain when the uterus was freely mobile. He would be a bold man who would venture positively to distinguish between certain changes in the cervix due to hyperplasia, lacerations, &c., of a bad kind but perfectly benign, and the early stage of carcinoma. If we wait until fixity is evident then the chance of success from extirpation is lost. Moreover, the progress is often so rapid that any delay may be fatal. Mr. Thornton would remember a case he saw with him two years ago in which they both believed the case

was malignant, and the uterus being perfectly mobile it was thought to be suited for extirpation. The friends naturally wished for further advice before coming to a decision, and Sir Spencer Wells and Dr. Matthews Duncan were asked to see the case. One week only elapsed between the two consultations, yet in that short space of time the uterus had become quite fixed, and all chance of success from it was over. The only cases, it seemed to him, in which extirpation offered a reasonable hope, were the comparatively rare ones in which the cancer was limited to the fundus and body of the uterus. Even in these it is doubtful if the operation is wise. By far the most promising case for extirpation he had ever seen was that of a lady whom he had visited in Yorkshire some three years since on account of uncontrollable uterine hæmorrhage. Here he had detected a soft fungating mass of malignant disease filling the uterine cavity, a portion of which he removed with the curette, making the diagnosis certain. The uterus was not very large and was perfectly mobile. He suggested the possibility of extirpation, and after full consideration the patient and her friends decided against it, and insufflation of iodoform and tannin in powder was advised to control the bleeding. He heard no more of the case, and concluded that it had soon ended fatally. Some months since, chancing to be again in the same neighbourhood, he had accidentally met the lady's medical attendant in a railway carriage. Inquiring about his patient he learnt that she was still alive in comparative comfort, the hæmorrhage having ceased. Surely this result was better than could have been reasonably expected from extirpation? With regard to epithelioma of the cervix, in which the same difficulty from diagnosis does not arise, he was perfectly satisfied that Sims's operation of excising the diseased cervix and applying chloride of zinc so as to produce a slough of the possibly infiltrated tissues, was a far safer and more hopeful procedure. Take, for example, such a case as that Sir Spencer Wells would remember seeing with him some months ago. In May, 1881, that is nearly four years ago, he (Dr. Playfair) had operated on this patient for an immense epithelioma of the cervix as large as the fist. For more than three years the patient remained perfectly well, going into society and enjoying life, and now, although there was evidence of mischief recurring, it was of an apparently slowly progressive kind, and she was still in comparative comfort. This is only one of many such cases, and contrasts favorably with the results of extirpation, with its terrible immediate mortality. He would only refer to one other case, because it was in some sense an historical one. Some two years since he was consulted as to a lady with a small, but undoubted epithelioma of the cervix. He advised Sims's operation, although the case was unquestionably well adapted for extirpation. The next thing he heard was that

Sir Spencer Wells had, in accordance with the wishes of the patient, extirpated the uterus. Thanks to his rare surgical skill and her own good fortune she recovered. Her case made a good deal of noise, and, the operation being then "*sub judice*," all the medical journals had laudatory articles on it, and very properly so, and we were led to hope that we were on the eve of another great triumph of abdominal surgery. In a comparatively short time—how long precisely he could not remember, but certainly within a year—the disease recurred, and the patient died. Sir Spencer himself, in the light of subsequent events, would probably be the first to admit that if the patient had been left alone, or had had Sims's operation performed, her expectancy of life would have been quite as good, without having had to run the tremendous risk of extirpation. Very reluctantly, then, he had to arrive at the conclusion that the hopes at first entertained from extirpation were fallacious, that it was never likely to become a good practical resource in this terrible disease, and that it must be abandoned as a hopeful and reliable procedure.

FEBRUARY 4th, 1885.

HENRY GERVIS, M.D., President, in the Chair.

Present—67 Fellows and 8 Visitors.

The President declared the Ballot open for one hour and appointed Dr. John Archibald and Mr. W. S. A. Griffith as Scrutineers.

Books were presented by Dr. M'Kee, Dr. A. Martin, and the St. Thomas's Hospital Staff.

Arthur H. N. Lewers, M.B., was admitted a Fellow.

Lovell Drage, M.R.C.S. (Hatfield); Frederick W. Gibbon, L.S.A. (South Shields); and P. Sydney Jones, M.D. (Sydney), were declared admitted.

The following Gentlemen were elected Fellows of the Society:—William John Beatty, L.R.C.P. Ed. (Stockton on Tees); P. Inkerman Cook, M.D. (Honor Oak); Wm. Morriston Davies, M.D.; Edgar A. Hughes, L.R.C.P. Lond.; James Oswald Lane, B.A., M.B. Cantab. (Northampton); and Adam Young, L.R.C.P. Lond. (Sevenoaks).

The following Gentlemen were proposed for election:—Dominick A. D'Monte, L.R.C.P. Lond.; and Frederick Charles Wallis, B.A., B.S. Cantab.

DERMOID CYSTS OF BOTH OVARIES.

Mr. Knowsley Thornton showed fresh specimens of dermoid cysts of both ovaries, removed a few hours before the meeting from a young married woman æt. 22. She was married in Oct., 1884, menstruated for a few days soon after, and then became pregnant. The abdomen had been too large for fully twelve months before marriage. Increase of size out of all proportion to the period of gestation, and attacks of spasmodic pain in the abdomen led her to seek the advice of Dr. Galabin, who placed her under Mr. Thornton's care for ovariotomy.

Having removed a multilocular tumour of the right ovary, with a twisted pedicle, Mr. Thornton found another tumour filling the pelvis, which he dislodged from behind the pregnant uterus with difficulty; it proved to be a tumour of the left ovary, and was also removed. Fortunately it was removed whole, as it was dermoid and full of fat, hair, &c., and if it had been tapped before it was extracted from the pelvis, it would have been very difficult to avoid fouling of the peritoneum. The tumour from the right side was also found to contain dermoid structures, fat, hair, bone, cartilage, and a tooth. On the surface of the tumour from the left side, and at some distance from the remains of the ovary, which was spread out over the cyst wall, was a large true corpus luteum.

The case was believed to be the first in which double ovariotomy had been performed during pregnancy. In cases in which only one ovary was removed, at about the same period of gestation, the patient usually recovered and went her full time, but at a later period of gestation abortion often followed.

In non-pregnant cases in which only one ovary was removed, especially when the operation was performed at some distance of time from the menstrual period, metrostaxis during the first few days was not the rule; but in cases in which both ovaries were removed, whether in

ovariotomy or oöphorectomy, a metrostaxis of some days' duration was almost universal. Mr. Thornton had only met with one case in which it was absent, and the patient was in a very low state at the time of operation. The closer the ligatures were applied to the uterus the more speedy and certain appears the metrostaxis, and fortunately in this case Mr. Thornton was able to tie on both sides at some distance from the uterus; still he could not help considerable anxiety lest metrostaxis and abortion should result.

Another point of interest in the case was the twist in the pedicle. In the two last cases in which Mr. Thornton had operated during pregnancy there was acute torsion of the pedicle with universal adhesions. One patient operated upon at the seventh month was delivered of a living child eighteen hours after operation, and made a good recovery; the other, operated upon during the fourth month, recovered, went her full time, and had an easy, natural labour. In the present case Mr. Thornton noted that the stump of the right pedicle twisted again directly the tumour was cut away, and this suggested to him that the torsion in these cases was influenced by the circulation.

A full report of this case will appear in the next volume of the 'Transactions.'

Dr. CHAMPNEYS said that such a specimen suggested that some cases of twisted pedicle might be due to growth (as in torsion of the umbilical cord), and not to forcible twisting by external force.

Dr. MATTHEWS DUNCAN regarded the return of the left or persistent portion of the pedicle to its twisted condition after the removal of the tumour as evidence that the twisting was probably not acute but of long standing. He could not recognise this return as evidence that the twisting was due to an influence derived from the circulation of the pedicle—an explanation which had been suggested for the twisting of the cord; for no such influence could account for the rare twisting on a transverse axis, or for the common twisting on a vertical axis occurring late in the history of the tumour.

Dr. ROUTH wished to ask Mr. Thornton whether it had not been better in this case to tap during the pregnancy so as to allow the parents to have a child. In removing both ovaries as

he had done he had completely prevented this woman from having, henceforward, any children; in fact made her barren. Would it not, therefore, have been kinder to tap once or twice till the child was born, and afterwards to operate.

In reply to remarks made by Dr. John Williams, Mr. THORNTON said that his impression—he had not had time to look up the facts—was that only about 30 or 40 per cent. of ordinary single ovariotomies had metrostaxis as a result of the operation; and his impression also was that the length of the pedicle and the consequent closeness with which the ligatures were tied to the uterus, influenced the occurrence of this metrostaxis; as did also the period at which the operation was performed after the last menstruation. Ligatures tied close on to the uterus, and propinquity to the coming menstruation greatly predisposing to metrostaxis. In reply to Dr. Routh he said that the tapping of a dermoid cyst was one of the most dangerous and unjustifiable operations in surgery, and with the abdomen open, he thought he should have incurred a very grave responsibility if he had done anything different to what he had done. The operation was performed on Wednesday, and on Saturday the temperature was normal, the pulse 72, and there had been no symptom of uterine disturbance.

THE PREVENTION OF OPHTHALMIA NEONATORUM AND OF ITS RAVAGES.

By DAVID MCKEOWN (Manchester), M.A., M.D., M.Ch.,
SURGEON TO THE BOLTON EYE HOSPITAL.

(COMMUNICATED BY DR. GRAILY HEWITT.)

I BEG to invite your attention to the two following questions: what can obstetricians do to prevent the ravages of ophthalmia neonatorum when it has manifested itself? and what can they do for the solution of the problem of the prevention of the disease itself?

The dangers of neglected purulent ophthalmia of infancy are so well known that it is not necessary to dwell at any length on the subject in order to secure for it your careful consideration. Over and over again attention has been called to the vast amount of total blindness due to this affection. Although we have not the data to show how many of the blind must attribute their calamity to this cause, there is abundant evidence that the number is very large. Ophthalmia neonatorum has been charged with having caused the blindness of

817 out of 1170 persons observed by Dr. Daumas, of Paris.

658 out of 2165 inmates of 22 blind institutions (Dr. Reinhard).

10·81 per cent. of 2528 cases analysed by Dr. Magnus.

37 out of 89 pupils in the Wilberforce School for the Blind.

70 out of 217 recorded cases at the Deaf, Dumb, and Blind Institution at Belfast.

From 33 to 50 per cent. of the total number of the blind in various countries (Dr. Haltenhoff).

It would be interesting to know the exact number of those totally blind in the United Kingdom from the affection under consideration, but at present it is impossible to ascertain it. A personal visit to all the institutions (public and private) in the kingdom where the blind are admitted would not advance us, because we would leave untouched the large classes of (*a*) the itinerant blind, and of (*b*) those who reside with their friends. Regarding them the only information available is that supplied by the Census returns, viz. that there are so many "blind at birth," *i. e.* practically speaking, blind from ophthalmia neonatorum. But this is very imperfect, for as ophthalmia neonatorum does not show itself for a number of days after birth, we may be sure that those returned as "blind at birth" form only a part of those who have lost their sight from it.

Blindness of both eyes, upon which so much stress is always laid, is the most striking of the ravages of this disease, but it is only a part of the mischief. I wish to draw special attention to the instances in which only one eye has been lost and to those in which there has been permanent impairment of the vision of either one or both eyes. Here again statistics are wanting, but there can be no doubt that the numbers to be classed under the head of "one eye lost," or, "permanent impairment of one or both eyes" would far exceed the number of those totally blind.

I fear that even had we an accurate statement of the condition of the eyes of every person in the kingdom it would not give a fair idea of the total blindness caused by ophthalmia neonatorum. The mortality in infancy is very great, and grave apprehensions are entertained that amongst certain classes of the community infant life does not possess that sacred character which it ought. If this be so what members of a family amongst those classes are likely to be the victims of neglect—those who are blind and helpless and likely to be a burden to the parents, or those without blemish? I have heard a mother, when told

that her child would be blind for life, say that it would be better for it to be dead than blind. This is painfully suggestive.

Practically speaking all these ravages can be prevented. There are, no doubt, cases in which, in spite of everything, the result may be unfortunate, but they occur so seldom that they need hardly be taken into account. We have thus a vast field for doing good.

There is one point on which ophthalmic surgeons are agreed, viz. that the present resources of medical science are, *if availed of in time*, sufficient to cope with the malady.

Although the children are probably ill on or before the fifth day after birth, it is often several weeks before we see them, and that simply because it is thought that the infants have caught a cold in the eyes and that it will wear away without doing any harm.

It is therefore necessary to impress on the minds of those in charge of new-born infants (*a*) that purulent ophthalmia may occur, (*b*) that it is very dangerous, and (*c*) that if the child's eyes become affected they must be treated without a day's delay by a doctor.

In a paper which I read some months ago before the Ophthalmological Society of Great Britain and Ireland I sketched a scheme for the instruction of the public through the medium of the Poor Law and Birth Registration Organisations of the kingdom. This scheme was subsequently unanimously adopted by that society and submitted by it to the authorities in the three divisions of the kingdom. I do not intend to ask you to consider it.

The important question, What can be done by the profession in the matter? remains, and here you will be able to make your influence powerfully felt. It is clearly the duty of every person (whether a doctor, a medical student, or a midwife) who attends a woman in confinement, before leaving the house after the confinement, to caution those in charge about the child's eyes, and leave instructions

that on the first appearance of any symptoms medical advice should be had.

The co-operation of the members of the profession can be secured through the medium of the medical journals. The students can be reached by the textbooks and lectures on midwifery, which should deal fully with the ætiology, progress, and treatment of ophthalmia neonatorum. It is indeed necessary that this course should be pursued. Students attending cases of labour very naturally look to the textbooks (which are carefully studied) and the lectures on midwifery as giving full directions on all points requiring attention. I have examined a considerable number of the principal textbooks on midwifery published in this country, and I find that ophthalmia neonatorum is not even mentioned.

I refer with pleasure to the rules for students attending obstetric cases framed by the authorities at St. Thomas's Hospital. These require that every patient after delivery should be visited daily for the first four days, and that all cases of purulent ophthalmia occurring among the children should be sent by the obstetric clerks at the earliest opportunity to the Eye department of the hospital. The provision is not sufficient, inasmuch as the risk of purulent ophthalmia is not over by the fourth day, but with a slight addition it can be made perfect. If such amended instruction were put into the hands of every medical student when about to attend cases of labour, much would be gained.

For the instruction of the midwives we should utilise the midwives' handbooks, all the institutions where women are trained as midwives, and the various charitable organisations which employ midwives. The bodies which grant certificates to midwives should see that the candidates are conversant with the dangerous nature of the disease and their duties with respect to it.

We have hitherto been considering the prevention of the ravages of the disease. Now we come to the prevention of the disease itself. Considerable attention has

been given to this subject on the Continent both by obstetricians and ophthalmologists. Infective matter in the genital passage of the mother is a very frequent, and has even been alleged to be the sole, cause of the affection, and hence attempts have been made to prevent the appearance of the disease by treatment applied to (*a*) the vagina before delivery and (*b*) the child's eyes immediately after birth.

It is claimed that by vaginal injections the frequency of the affection has been diminished, and by some that by treatment of the eyes the disease has been banished. Results of treatment have been published by several continental practitioners, and I would refer to an interesting paper by Professor Simpson, published in the 'Edinburgh Medical Journal' of 1883, in which he gives a summary of what had been done.

Abolition of the disease is stated to have been obtained—

(1) By Crédé, of Leipzig, *in a first series of* 199 *cases* by washing the eyes with pure water and then with a glass rod applying a 2 per cent. solution of nitrate of silver, and afterwards applying for twenty-four hours lint soaked in a 2 per cent. salicylic solution; *and in a second series of* 300 *cases* in which the compresses were omitted, the treatment in other respects being the same, *i.e.* abolition in 499 cases.

(2) At the Stuttgart Maternity, where in 1881 Crédé's plan (omitting the compresses) was introduced. From 1871 to 1881, when no prophylaxis was used, the percentage ranged from 1·1 to 14·3.

A large reduction in the frequency of the affection has been effected—

(1) By the nitrate of silver treatment (without the compresses) employed in the wards of Professors Carl and Gustav Braun, where of more than 3000 births only 1·93 per cent. were affected, whilst of 1887 born at the same time, but not similarly treated, 4·34 per cent. were affected.

(2) By Professor Olshausen, of Halle, who, by washing

the eyes with a 1 per cent. carbolic lotion, reduced the percentage from 12·5 to 6.

(3) In the practice of Professor Simpson. Of 57 infants treated by Crédé's method (a weaker solution than Crédé's was used and the compresses were omitted), 3 only were affected and that mildly, whilst of 85 before the commencement of this treatment, 10 were affected.

Of 2266 births in the practice of Dr. Abegg, of Danzig, who washed the eyes immediately after birth with pure water, only 3 per cent. were affected (the percentage, without washing, is not stated).

Reduction in the frequency of the affection has also been obtained by—

(1) Bischoff, of Basle, who, by vaginal carbolic injections and washing of the eyes with salicylic lotion, reduced the percentage from 5·6 to 2·6.

(2) Crédé, by vaginal injections (carbolic or salicylic). In the first half of 1880 he effected a still further reduction (to 7·6 per cent.) by washing the eyes in solutions of borax or nitrate of silver. In the six years previous to that date (1874-79), out of 2079 births there were 212 cases of ophthalmia neonatorum giving the following percentages in the successive years, 13·6, 12·9, 9·1, 8·3, 9·8, 9·2.

A critical analysis of the reports of the different observers is unnecessary for our purposes. It is not desired to advocate the general adoption of any one or more new methods of treatment, but simply to point out that the researches of our Continental brethren have been of such a satisfactory character as to warrant us in entering upon an extensive series of investigations in order to determine to what extent the occurrence of ophthalmia neonatorum may be prevented, and what methods of treatment yield the best results. These are points which can be settled by the obstetrical authorities, and by them alone. The ophthalmic surgeon has no opportunity of preventing the disease, he merely deals with it when it has manifested itself.

Inquiries are needed regarding—

1st. The influence of cleansing and disinfection of the genital passage of the mother previous to delivery. Assuming that such cleansing and disinfection reduce the frequency of ophthalmia neonatorum, is it a plan of treatment which may be adopted as a routine practice in every case of labour?

It is difficult to see how, having regard to the constancy and rapidity with which the secretions are produced and the length of time occupied in the passage of the head, immunity from risk of contagion can be secured. I have no doubt the risk can be diminished, and it is for you to say in what way this can be best accomplished.

2ndly. The influence of simple cleansing, of cleansing and disinfection, and of cleansing and astringent treatment of the eyes immediately after birth.

For simple cleansing, pure warm water is to be used. The process is to be applied first to the external surface of the eyelids and then to the conjunctival sacs. Before dealing with the latter, the attendant's hands should be washed with some disinfectant. To thoroughly cleanse the sacs considerable care is necessary.

For disinfectants, various strengths of the ordinary agents—carbolic acid, boracic acid, resorcin, iodoform, oil of cade, &c., may be used. The best agent and the best formulæ can only be found by an extensive trial.

Various astringents of various strengths can be employed. That used by Crédé with so much success, viz. a 2 per cent. solution of nitrate of silver seems somewhat strong and might be replaced by a solution which, while weaker, would be equally effectual.

One point of essential importance is that the *entire* treatment of the eyes should be in the hands of members of the profession, so that we may have every confidence in the published results, and may feel assured that they represent the utmost that can be expected from the various methods of treatment.

The treatment under consideration would, in the hands

of a careless and inattentive person, be useless, and, indeed, might be positively injurious. A difference in the intelligence and care with which it has been employed may account for the results obtained by some observers being better than those obtained by others.

Where, and by whom, are these investigations to be carried on? In the various lying-in hospitals of the country, and by the resident medical officers of those institutions. If the result be favorable, the researches must, in order to carry general conviction, be extended over a considerable period, and it will be a long time before the new treatment will be universally adopted. Meantime, we may rest perfectly satisfied, knowing that with the present resources of our art almost every eye can be saved.

Dr. GRAILY HEWITT had been requested by the author of the paper, Dr. McKeown, to communicate it to the Society, and had much pleasure in doing so, as the subject dealt with was of very great importance. Owing to researches of various observers the nature and treatment of ophthalmia neonatorum was now understood, but the difficulty of promulgating the necessary knowledge as to the danger of the affection and the method of dealing with it among those entrusted with the early management of infants remained. This Society could appropriately and usefully lend its aid in promulgating this knowledge. Some years ago the Obstetrical Society drew up and published a most valuable code of instructions for the management of infants. This had proved most useful and was sold largely by Messrs, Longmans at a nominal price. The practical suggestion he had to make was that a paragraph should be added to the "rules" in question, containing such information as should be thought desirable in reference to the prevention and treatment of ophthalmia neonatorum. The paragraph in question should be carefully drawn up under the direction of the Council, to whom he would move that the matter be referred for consideration. The object was mainly to disseminate a knowledge of the fact that the disease is a serious one, and one requiring timely professional treatment, as well as to point out how it is to be prevented. He also thought it desirable that measures should be adopted to ensure attention to the subject by pupils attending midwifery cases in connection with schools of medicine or otherwise.

Dr. WILLIAM DUNCAN remarked that the great majority of the

cases occurred amongst the lower orders, who were attended either by students from the hospitals or by midwives. Dr. Duncan has made it a rule at the Middlesex Hospital that all cases of ophthalmia in newborn infants be at once sent to the ophthalmic surgeon, and whilst he thought it essential that both students and midwives be instructed in the importance of diagnosing these cases, he strongly deprecated the proposal to teach them the mode of treatment, but insisted that they should at once send the case to an ophthalmic surgeon.

Dr. GRAILY HEWITT moved a resolution that it be referred to the Council to take steps to consider the desirability of adding a paragraph to the rules for management of infants on the subject of ophthalmia neonatorum.

The resolution was seconded by Dr BRAXTON HICKS, and adopted.

The PRESIDENT said he had been requested to call attention to the series of questions published by the Collective Investigation Committee, which appeared in the 'British Medical Journal' of the preceding week, on the subject of puerperal pyrexia, and ask the co-operation of the Fellows of the Society in furnishing replies. He might add that the questions appeared to him well adapted for their purpose.

Dr. CLEVELAND proposed that a copy of the rules for infantile management should be sent with the forthcoming volume to each Fellow.

Dr. GEORGE ROPER seconded the proposal, which was carried.

It was proposed by Mr. MEREDITH, seconded by Mr. ARTHUR ROPER, and carried, "That the changes in the Bye-laws proposed by the Council be adopted by the Society."

The following were the alterations in the laws proposed for adoption :

Cap. I. Sec. V.—After "a Treasurer," insert "a Chairman of the Midwifery Board," so that it shall stand thus:—

The Officers of the Society shall be elected from the Fellows, and shall consist of a President, six Vice-Presidents, three Trustees, a Treasurer, a Chairman of the Midwifery Board, an Honorary Librarian, and two Honorary Secretaries.

CHAPTER XV.

OF THE BOARD FOR THE EXAMINATION OF MIDWIVES.

[*As it now stands.*]

I. The Board shall consist of a Chairman, three non-official Members, and the President and Secretaries *ex officio*. Their duty shall include the management of all matters connected with the examination of Midwives, and they shall be elected annually by the Council.

II. One of the non-official Members of the Board shall retire annually, in order of election, and shall not be re-elected till after the lapse of one year. Any non-official Member who shall not have attended half at least of the Meetings of the Board during the year shall also cease to be a Member of the Board.

III. The Chairman after four years' service shall retire, and shall not be re-elected till after the lapse of one year. During his term of office he shall be *ex officio* a Member of the Council.

IV. The Board shall meet quarterly—in January, April, July and October.

[*The proposed alteration.*]

I. The Board shall consist of a Chairman, three non-official Members, and the President and Secretaries *ex officio*. The Chairman shall be elected annually at the Annual General Meeting of the Society; the three non-official Members shall be elected annually by the Council. The duty of the Board shall include the management of all matters connected with the examination of Midwives.

II. One of the non-official Members of the Board shall retire annually, in order of election, and shall not be re-elected till after the lapse of one year. Any non-official Member who shall not have attended half at least of the Meetings of the Board during the year shall also cease to be a Member of the Board.

III. The Chairman shall not hold office more than four years in succession. He shall make an Annual Report of the work done by the Board.

IV. Candidates shall be admitted to the examinations on such conditions, and be examined on such subjects, and in such

manner, as the Council shall determine.

V. Candidates shall be admitted to the examinations on such conditions, and be examined on such subjects, and in such manner, as the Council shall determine.

CHAPTER XVI.

OF THE TRANSACTIONS OF THE SOCIETY.

[*Secs. III. and V. as they now stand.*]

III. A Committee of twelve or more Referees shall be appointed by the Council annually, to examine and report on any papers which the President may think ought to be referred to the Committee prior to their being read before the Society.

V. If it should appear to the President and Secretaries that, for any reason whatever, there is room for doubt whether any communication sent to be read at a meeting should be read before the Society, such paper shall be sent to two Referees from among those annually appointed. If the two Referees disagree, the paper shall be submitted to a third Referee, but the decision shall always rest with the Council.

[*Secs. III. and V.—The proposed alteration.*]

III. A Committee of twelve or more Referees shall be appointed by the Council annually, to report on all papers which may be sent to the Society.

V. Every paper, prior to its being read, shall be sent to two Referees from among those annually appointed. If the two Referees disagree, the paper shall be submitted to a third Referee, but the decision shall always rest with the Council.

In reply to Dr. Cleveland the PRESIDENT stated that in every case the reports of the Referees would be subject to confirmation by the Council.

The Scrutineers of the ballot then presented their report, and the President announced that the following

officers, nominated by the Council, had been elected by the Society.

Honorary President.—Arthur Farre, M.D., F.R.S.

President.—John Baptiste Potter, M.D.

Vice-Presidents.—James Watt Black, M.D., Peter Lodwick Burchell, M.B., Frederick Henry Daly, M.D., William Henry Day, M.D., Edward Malins, M.D. (Birmingham), J. Lucas Worship (Sevenoaks).

Treasurer.—Alfred Lewis Galabin, M.A., M.D.

Honorary Secretaries.—George Ernest Herman, M.B., Francis Henry Champneys, M.A., M.B.

Honorary Librarian.—John Knowsley Thornton, M.B., C.M.

Other Members of Council.—Percy Boulton, M.D., Robert Cory, M.D., Charles James Cullingworth, M.D. (Manchester), Alban Doran, William Archdeckne Duncan, M.D., George F. Farr, Alfred Thomas Gibbings, M.D., John T. Griffith, M.D., Frederick B. Hallowes (Redhill), Robert Jackson, M.D., George Thomas Keele, Alfred Edward Aust Lawrence, M.D. (Bristol), Gustavus C. P. Murray, M.D., William S. Playfair, M.D., George Roper, M.D., John Thorburn, M.D. (Manchester), John Wallace, M.D. (Liverpool), James Hopkins Walters (Reading).

The report of the Treasurer, with the audited balance sheet, was then read.

It was proposed by Mr. KNOWSLEY THORNTON, seconded by Dr. CORY, and carried, "That the audited report of the Treasurer, just read, be received, adopted, and printed in the next volume of the Transactions."

The following report of the Honorary Librarian was then read:

"In reporting to the Society upon the state of its library, I have the pleasure to announce that it has been enriched during the past year by 38 presentation volumes and 8 pamphlets, the latter being bound in one volume;

BALANCE-SHEET OF THE OBSTETRICAL SOCIETY OF LONDON.

(Abstract of the Receipts and Expenditure for the year ending December 31st, 1884.)

1884. RECEIPTS.			£	s.	d.
To balance from 1883:					
At Bank	207	0 7			
Cheque not cleared (New Zealand)	1	1 0	—208	1	7
(1) 653 Subscriptions at £1 1s., realising			685	13	10
(2) 2 Life Composition Fees at £10 10s.			21	0	0
(3) Midwifery Examination Fees			54	19	0
(4) Sale of 'Transactions' (Longmans)	55	4 0			
Do. 'Rules for Infants' (Society)	0	4 9			
Do. Duplicate books	0	1 6	— 55	10	3
(5) Interest on Consols			38	7	2
Amount of stock, 3 per cent. Consols, standing in the names of the Trustees	£1400	0 0			
			£1063	11	10

By EXPENDITURE.			£	s.	d.
(1) 'Transactions,' Vol. XXV, Printing, Lithography, Paper, Binding, Index, and delivery of Volume			252	3	11
(2) Library:					
Books Purchased and Binding			47	3	5
(3) Museum and Library:					
Rent	£100	0 0			
Salary of Librarian and Commission	134	14 6			
Furniture, Repairs, Cleaning, Coals, &c.	48	1 2			
Petty Disbursements	1	15 6	—284	11	2
(4) General Meetings and other Expenses:					
Rent of Meeting-room	£42	0 0			
Expenses of Meetings	22	12 0			
Stationery and Postage	50	4 6	—114	16	6
(5) Examination of Midwives:					
Expenses of			8	4	11
(6) Extraordinary Expenses:					
Donation to Wheatley Fund			25	0	0
Commission on Cheques	0	2 6			
Cheque-book	0	4 2	— 0	6	8
Purchase of Consols (£94 6s.)			93	14	6
Balance at Bank			237	10	9
			£1063	11	10

February 2nd, 1885.

Examined and found correct,

AMAND J. Mc. C. ROUTH,
P. HORROCKS,
ALBERT J. BUTLER-SMYTHE, } *Auditors.*

31 volumes, and 14 pamphlets bound in two volumes, have been added by purchase. The periodicals taken in number 52, and the grand total of volumes is 3406, as against 3282 at the end of 1883.

"During the past year the Library Committee have recommended certain precautions with regard to the circulation of rare and specially valuable books; these suggestions have been adopted by the Council, and will, it is hoped, aid in the preservation of the treasures of the Society, without unduly restricting their use by the Fellows.

"I regret to have to report, upon the authority of the Librarian, that the Library has not been quite so much used by the Fellows since the new rooms were occupied.

"J. KNOWSLEY THORNTON."

It was proposed by Dr. GODSON, seconded by Mr. DORAN, and carried, "That the report of the Honorary Librarian be received, adopted, and printed in the 'Transactions.'"

The following report of the Board for the Examination of Midwives was then read:

"The Board of Examiners have the honour of presenting their annual report. During the past year 63 candidates presented themselves for examination; of these 49 showed a satisfactory acquaintance with midwifery and received the diploma of the Society, while 14 failed.

"We may add that although a larger number of women have failed than during the previous year, the standard of general and special knowledge reached by those who passed appeared higher than during former years.

"JOHN WILLIAMS, M.D., Chairman."

It was proposed by Dr. CLEVELAND, "That the report of the Chairman of the Board for the Examination of Midwives be received, adopted, and printed in the 'Tran-

sactions,' and that the cordial thanks of the meeting be given to Dr. JOHN WILLIAMS."

Dr. AMAND ROUTH seconded the proposal of Dr. Cleveland, and pointed out an extended use to which the Board for the Examination of Midwives was now being put, viz. the examination of ladies sent out by the Zenana Medical Missions. These societies made it encumbent upon all their lady medical missionaries to become either fully qualified, or to obtain a certificate of proficiency in midwifery from the Board. The motion was carried.

The President then delivered the following address

ANNUAL ADDRESS.

GENTLEMEN,—Once again from this chair, and for the last time, it devolves upon me to briefly review our general position as a Society, to offer you some account of our work during the year which closes to-night, and to pay the customary tributes to the memories of those of our Fellows whom we have lost.

As regards the general position of our Society, I have again to speak to you in the full strain of congratulation. During the past year we have welcomed into our ranks 67 new Fellows, a considerably larger increase than the average of many preceding years; and although against this large increase we have to place our losses by death, amounting to 10, and those by resignation and erasure, reaching to 31, our numbers now stand at 722, forming a larger constituency than that of any other London Society, unless, as in the case of the Royal Medical and Chirurgical Society, its non-subscribing Fellows are included, when its numbers slightly exceed ours, the Pathological Society coming next, with 684. The attendance at our meetings has been everything we could wish, and on more than one occasion in the summer, when there were great attractions elsewhere, the loyalty of our Fellows was such that no falling off occurred in the numbers present. I may perhaps, in passing, be pardoned for expressing my gratification—a gratification I am sure in which all present share—at the regularity with which so many senior Fellows of the Society, including nearly all those who have filled this chair, attend our meetings. After long years of splendid work and service, when temptations to ease become somewhat strong, still evening after evening they have been here, encouraging us by

their presence, and assisting us by their knowledge and experience. Respecting our finances you have heard from the report of our Treasurer the gratifying intimation that after payment of all our liabilities and the investment of nearly £100, we close the year with a balance of £237, and with the amount of £1400 in Consols. The Report of our Hon. Librarian is also highly satisfactory. A library of 3406 vols. is no small addition to the equipment of a Society, and the advantages offered by our rooms in Berners Street can hardly be surpassed. In comfort and convenience they approach, indeed, those establishments which recently a great statesman spoke of as "temples of luxury and ease." As regards our midwifery examinations the report of our Chairman will have told you much that is encouraging. Our diploma is becoming increasingly popular, and, as you have heard, no fewer than sixty-three candidates presented themselves during the past year for examination, of whom forty-nine passed, raising the total number of midwives in possession of our certificate to 247. Among the numerous claims our Society has on the profession—and in twenty-five years few Societies, if any, have established greater—not the least is the impetus given through our Midwifery Board to the higher education of midwives.

Now, as to our work during the year that has passed. In briefly reviewing it I have first to recall to you the paper read by Dr. J. Williams at our meeting in March, on "Corroding Ulcer of the Os Uteri," by common consent an excessively rare disease, almost undescribed by systematic writers, and which probably had often been mistaken for rodent ulcer, or some form of epithelioma. The particulars of Dr. Williams' cases, however, their clinical features, and the results of microscopical observation, appear to separate them distinctly from cancerous affections; less distinctly perhaps from lupus, a disease, indeed, thought by some speakers to be probably identical with the disease described by Dr. Williams.

The early part of our meeting in April was occupied by

Dr. Francis Neugebauer's exhibition of specimens of vertebræ from cases the subjects of spondylolisthesis, and by his personal exposition of his views. In Dr. Neugebauer's opinion the slipping forwards of the vertebræ characteristic of the disease occurs not as a result of any dyscrasia, such as rickets or osteomalacia, or of any bone disease, inflammatory or specific, as caries or ostitis, but by the weight of the trunk, especially when this is increased by unusual stoutness or frequent pregnancies, acting in virtue of certain surgical predispositions or lesions; and further, that the deformity is not limited either to the sacro-lumbar articulation or to any age or either sex. The surgical predispositions he believes to be most influential are, first, a congenital arrest of development produced by defective ossification in the vertebral arch, and secondly, complete or incomplete fracture of the arch with imperfect union. These conditions permit a sliding forward of the anterior part of the last lumbar vertebra. But he considers also that the last lumbar vertebra may sometimes not merely partly slide forward but be totally displaced forwards, as a result of fracture of its articulations, with the sacrum; and this he terms "glissement en masse." In a word, both the less and more pronounced forms of spondylolisthesis he considers traumatic in origin.

The same evening we had Mr. Doran's suggestive paper on the "Genealogical relations between Prolapse of the Vagina and Intestinal Hernia," illustrated by three pedigrees of patients who suffered from prolapse of the anterior wall of the vagina, and in whose families a remarkable tendency to other hernias existed. The paper as a whole strongly supported the views now largely held that not merely prolapse of the vagina, but prolapse of the uterus itself, is essentially a hernia, "with a definite sac, definite boundaries, and definite contents."

Dr. Kilner concluded an interesting evening by a valuable communication on the use of the induced current in parturition. Dr. Kilner not only uses electricity for strengthening uterine contractions when feeble, and

checking post-partum hæmorrhage, but also very largely for the relief of the *pain* of labour, as an equaliser of the pulse, and as a preventive of undue exhaustion. Dr. Kilner showed a very small and easily portable coil battery which he used in ordinary midwifery cases, and if similar results can be obtained by other and less specially skilled observers, there can, I think, be no doubt that in electricity in this form we gain an agent which will be a valuable adjuvant in the ordinary management of labour.

At the meeting in May Dr. Arthur Mitchell brought before us the result of his wide experience as to the influence of mental emotion in women as a cause of idiocy in the offspring. In many cases in which this was assigned as a cause by the mother Dr. Mitchell thought the evidence insufficient, but in some he expressed his distinct belief that it was a true cause, especially if the state of mental emotion had been a protracted one, although, possibly, its influence on the intellect of the child might be indirect, and through its influence on the bodily health of the mother. In the debate which followed Dr. West thought the verdict must still be "non-proven," but Dr. Fletcher Beach, Dr. M. Duncan, and other speakers coincided with Dr. Mitchell's view that there was a certain proportion, at present unsettled, of cases of idiocy in which mental emotion in the mother had been the determining cause.

In connection with Dr. Mitchell's paper I may perhaps be pardoned if I venture to call attention to the fact that in the work of this Society we have strangely overlooked the Department of the Diseases of Children. And yet at its formation it was expected that children's diseases would occupy a prominent place in our proceedings; and in our Bye-laws and Regulations the first section of the first chapter states that the Obstetrical Society of London is instituted for the promotion of knowledge in all that relates to obstetrics and the diseases of women and children. But in our twenty-five years' work I can recall, excluding this evening's paper on "Ophthalmia Neona-

torum," scarcely half a dozen communications on infantile diseases. Dr. Tanner once brought forward the subject of infantile syphilis; Dr. Playfair of empyema in children; Dr. Madge narrated some cases of pericarditis and chronic hydrocephalus; Mr. Curgenven read a paper on "Hereditary Convulsions;" and Dr. Wynn Williams gave us an interesting account of his treatment of diphtheria, a monograph to which, to this day, I feel much indebted when brought into contact with that disease. With possibly one or two additional papers which I may have overlooked, and an occasional discussion in connection with the exhibition of some specimen, this constitutes the whole of our work in this important department.

In days gone by I have heard it said occasionally that the one fault of our Society, if it had a fault, was its too great devotion to gynæcology, and that there was just a suspicion of a tendency to sameness and repetition in our discussions; that come to a meeting when he might, a practitioner was sure to hear us discussing some gynecic minutiæ, or by way of change some obstetric rarity, and less often than he could have wished those commoner subjects which are met with in daily practice and at the bedside of the puerperal woman. Be this as it may, though for my own part I must plead a still deep interest even in such well-discussed subjects as the symptomatology and treatment of uterine flexions, there is, I think, no doubt, that if some of those of our Fellows who practise generally, and are having the daily care of children, would bring before us some of the results of their observation and experience in these diseases it would add much to the utility of our meetings, give variety to our discussions, and assist in the more complete fulfilment of the objects proposed at the foundation of our Society. At this same meeting in May we had the notes of a case of extra-uterine gestation by Dr. Mathieson, of Ontario, in which a living child was delivered by vaginal incision from a cyst by the side of the uterus. A considerable discussion followed, not merely as to the advisability of the

particular operation performed, but also as to the exact character of the case; several speakers thinking it to be a gestation in a variety of double uterus, or an interstitial gestation, rather than one truly extra-uterine.

At the June meeting we had important contributions from two past Presidents of the Society. Dr. Playfair gave careful and detailed particulars of two cases in which he believed that spontaneous absorption of thrombi in the pulmonary artery had taken place; and Dr. Matthews Duncan read a paper on "Fœtal Revolutions as distinct from its Rotations," and described the various forms of revolution observed in different presentations and conditions of the fœtus.

At the July meeting the report of the committee on Dr. F. Neugebauer's specimens of spondylolisthesis was read; a committee, including besides two of our own Fellows, Dr. Barnes and Mr Doran, two who were visitors on the evening when Dr. Neugebauer was present, Mr. W. Adams, and Mr. Noble Smith, to all of whom our best thanks are due for the trouble and time they gave to the consideration of the subject. This report confirmed the view of Dr. Neugebauer that spondylolisthesis arises from the traumatic slipping away of the anterior half of one or more vertebræ, notably of the fifth lumbar, from the posterior half. Dr. J. Williams then gave a detailed account of the progress of involution in the puerperal uterus in a case in which both the ovaries had been removed, one three years previously, and one during the labour which preceded the involution in question. Involution was at first distinctly delayed. Seven weeks after delivery the uterus was of the size usual in the fourth week; but seven months after delivery the condition termed super-involution had occurred, the uterus was smaller than would be normal even in a nullipara and measured but two inches in length. At the same meeting Dr. M. Duncan, in association with Dr. Hurry, read a very interesting and important paper, illustrated by numerous specimens and drawings, on the subject of fœtal flexions

and extensions during pregnancy and their bearing on the etiology of malpresentations.

At our meeting in October, delayed a week by the occurrence of the 1st on a Wednesday, we had from Mr. Hopkins Walters an account full of interest of a case in which the uterus with one ovary and tube had been forcibly torn away by the midwife in attendance on the case, and in addition to these particulars Mr. Walters gave a summary of a large number of cases more or less parallel in which accidental avulsion of the uterus had occurred. In some of these the uterus had been inverted and an erroneous diagnosis of tumour had led to the occurrence. In others, and in the fewer number, as in Mr. Walters's case, no previous inversion had existed. Various theories as to the *modus operandi* were suggested by those who took part in the debate; such as the introduction of the hand into the peritoneal cavity through a rent in the posterior wall of the vagina and so pulling the uterus out by force from above; too forcible expression by pressure on the lower abdomen; retroverting the uterus first by the introduction more or less of the hand into its cavity, and then tearing it away by the purchase so obtained; and, lastly, Mr. Walter's own idea that it was at first detached, partially at all events, by thrusting the hand into it for the removal of the placenta without making adequate counter-pressure on the hypogastric region, and then torn entirely away, partly in panic, and partly through ignorance. In whichever of these ways the accident occurred in this particular case, speaking generally, there can I think be no question that in any and every case the forcible avulsion of the uterus after delivery is a proceeding of the utmost gravity and entailing the most serious responsibility

At our meeting in November Dr. Graily Hewitt read a paper illustrating his views on the close connection he believes to exist between distortion and displacement of the uterus in pregnancy and severe sickness. In addition to cases occurring in his own practice, Dr. Hewitt brought

before us an interesting series of ten cases published by Professor Horwitz, and others by other writers, making in all thirty-two cases in which more or less displacement of the uterus, both general and axial, was associated with vomiting of a severe type in early pregnancy. In all those cases where attempts were made to raise the uterus from its displaced position, and the attempt was successful, the vomiting ceased, but when the attempt failed death resulted, except where artificial and spontaneous abortion took place. The conclusions which Dr. Hewitt tabulated were that nearly always sickness was due to some error in the condition of the gravid uterus itself—that this error was generally some interference with its normal expansion and growth, associated sometimes with its detention in the bony pelvis, generally as a result of flexion or version, or less commonly from the presence of some pelvic tumour, and sometimes, but less frequently, in association with undue hardness about the os and cervix. Very varied views were expressed by those who took part in the debate, which occupied two evenings, but the more general opinion appeared to be that displacements and distortions of the uterus were less influential factors in the etiology of pernicious sickness than Dr. Hewitt thought, and that even the large number of cases he brought forward were not sufficient to permit as yet any dogmatic generalisation on the subject. It was not the wish of the Fellows present to allow the debate to occupy a third evening, and so it happened that several who were anxious to speak, myself among the number, had not the opportunity. I am the more wishful, therefore, in this reference to the work of that evening, to say how indebted we are to Dr. Hewitt for the very considerable addition he has made in his paper, as well as in the tables he was good enough to print for our use, to the facts on which to build our views of these rare cases. Very briefly my own experience has been this: that when conception has taken place in women the subjects of chronic flexion, and particularly of anteflexion, severe enough to have led to preceding dys-

menorrhœa, and so been noted beforehand, but not severe enough to have induced sterility, there has nearly always been an increased tendency to early and very troublesome sickness, and often to other reflex derangements, such as pyrosis, ptyalism, and various neuroses. Flexions of the uterus, gravid and non-gravid, lead, I believe, in a considerable proportion of cases to a pathological hyperæmia of the uterus. So, it may be, that this tendency to sickness which prevails in cases where flexion coexists, is not due to flexion as flexion, but to the pathological hyperæmia which it, in common with other faulty conditions, such as endometritis, ovaritis, or fibroids is apt to induce. In incarceration of a gravid uterus, whatever be the cause of the incarceration, this pathological hyperæmia would be still more increased, and the reflex results proportionately heightened. As regards Copeman's method, I should like also to take this opportunity of stating that my experience of it in cases of uncontrollable vomiting, by which I mean vomiting beyond the control of any medicinal or dietetic treatment, when associated with anteflexion, has been distinctly satisfactory. I have no experience of it apart from this association.

And, lastly, at our meeting in January, Dr. W. Duncan brought forward in a thoughtful and comprehensive paper the subject of extirpation of the uterus. Besides giving details of two cases in which he himself had performed the operation, and discussing the subject generally, Dr. Duncan gave a tabular statement of all the known cases in which the entire uterus had been removed, either by the abdominal or the vaginal operation, amounting in the former to 137, with a death-rate of 72 per cent., and in the latter to 276, with a death-rate of 28·6. These tables alone must have involved considerable work and research, and for his kindness in printing them so as to further the completeness of the debate, we are greatly in his debt. The debate being adjourned, I am not in a position to sum up the final result, but so far as the pro-

ceedings of one evening extended, every speaker, whether basing his opinion, like Dr. J. Williams and Mr. Thornton on personal experience of the operation, or like Mr. Doran on the anatomical relations of the uterus, especially with reference to the arrangements of its lymphatic system, expressed himself in terms generally adverse to the operation. This, indeed, was the conclusion at which Dr. Duncan had himself arrived, at all events for every case of cancer involving only the vaginal cervix. The other conditions for which extirpation had been carried out, such as prolapsus and certain cases of endometritis, were not touched upon in the debate, but I shall be surprised if much support is given to such procedure by any speaker at the April meeting.

This, gentlemen, is but a very brief and imperfect sketch of the more important papers and discussions of the session, and far from represents the sum total of our work. At every meeting we have had numerous specimens exhibited, some of extreme and general interest, some of great rarity, nearly all important and instructive. Indeed, after two years of close attendance at our meetings, I am not sure whether I have not learned as much from what I have seen as from what I have heard. But at the same time with the wealth of contributions in the hands of our secretaries, and the life and vigour which characterise our Society, it is impossible to allow the exhibition of specimens to extend much at all events beyond the half hour allotted to them. Possibly, if we were to adopt the plan of the Pathological Society and have card specimens passed round, specimens with short descriptive accounts appended, and intended for inspection rather than discussion, the difficulty of getting in all we wish would be at least partially met. Regarding, then, our work as a whole, the papers read, some in the highest degree scientific, some more practical, and some chiefly clinical, the specimens exhibited, including many improvements in instruments and apparatus, and the discussions elicited at uniformly well attended and often

crowded meetings, I think we may fairly claim for our Society, not only that its strength and vigour are unabated, but that it ranks as an educational force of the first importance.

Our losses by death this year are fortunately not so numerous, as often as they have been, but the list, always too long, includes some well-known names, and others who, although of less wide reputation, were not the less dear to their own circle of relatives and friends, to all of whom our respectful sympathy is given.

The first to be taken from us in the early spring was *Dr. J. Hickinbotham*, of Birmingham. He had been a Fellow of the Society since 1867, and last year was elected on the Council. Dr. Hickinbotham had practised in Birmingham for many years, and for the last five had been Physician to the Hospital for Women in that town. He died on February 22nd, of acute nephritis after a few days' illness, at the early age of forty-four. Dr. Hickinbotham was a frequent attendant at our meetings and often took part in our debates. To our Transactions he contributed, in 1878, an interesting case of ruptured uterus in which the accident occurred from a fall, the patient recovering. And in 1881 he sent us a case of placenta prævia complicated by the presence of a large fibroid in the uterine wall. Both these cases contained much that was interesting and important. Two other papers by Dr. Hickinbotham I have also by me, one on missed labour and one on accidental hæmorrhage. These also contain thoughtful and original work.

Dr. John Hall Davis, formerly a President of this Society, and up to a short time prior to his death, Obstetric Physician to the Middlesex Hospital, died on the 19th of March at the age of seventy-three. Dr. Davis was the second son of Dr. David Davis, the first occupant of the chair of Obstetric Medicine at University College, and a distinguished London obstetrician. Dr. Hall Davis began early to turn his attention to obstetric work, succeeding his father on his death in 1841 as Physician to the Royal

Maternity Charity, a post he held with much advantage to the charity and distinction to himself for thirty years. He also at one time gave well-attended private lectures on midwifery at his residence in Bloomsbury. In 1863 he was appointed Obstetric Physician to the Middlesex Hospital and Lecturer on Midwifery in its School. Of our own Society Dr. Davis was an original Fellow, and in 1867 he was elected to the Presidential Chair, fulfilling its duties with much ability, courtesy and success. Dr. Davis was the author of one considerable systematic treatise of much value on "Difficult Parturition," and of several interesting communications to this Society. It was my good fortune to be associated in three several instances with Dr. Davis in public appointments. I was for a time his colleague on the Royal Maternity Charity; I was Secretary of this Society during his Presidency; and I was co-examiner with him at the University of London; and I am grateful for this opportunity of offering my sincere tribute to his professional capacity, his uniform courtesy, and his high personal character.

Another original Fellow, *Mr. Richardson*, of Rhayader, died on August 13th, from the result of an accident, at the age of fifty-five. Returning from a professional visit, he was thrown from his dog-cart and instantly killed. I do not remember Mr. Richardson's making any communication to our 'Transactions,' but he evidently took a special interest in obstetric work, as quite recently before his death he read a paper at the Belfast Meeting of the British Medical Association on "Uterine Hæmorrhage." He was held in the highest esteem in the neighbourhood in which he practised, his funeral being attended by many hundreds of attached patients and friends, it being indeed the largest ever known in Rhayader.

In the same month died *Dr. Hugh Cuolahan*, of Bermondsey, a Fellow since 1867. I had the pleasure of a personal acquaintance with Dr. Cuolahan for many years, and knew him as an admirable specimen of the family practitioner. He was a frequent attendant at our

meetings, and was himself an accoucheur of much expertness and ability.

In August also we lost *Dr. Westmacott* at the age of seventy-three, and although not an original Fellow he, like myself, joined our Society in the first year of its existence, and was a most regular attendant at our meetings. He made but one communication to the Society, and that on the use of the whalebone loop as a fillet, of which he was a warm advocate. Dr. Westmacott's special loop had on one side of the handle a couple of screws with nuts to permit one end of the loop being removed so as to facilitate its slipping over the head of the child as it passed the vulval orifice in cases where the perineum was rigid. Dr. Westmacott, who was Obstetric Surgeon to the Paddington Maternity, appears to have generally used this loop in all minor cases of disproportion, and to have had with it a very considerable success. But it was as our draughtsman that Dr. Westmacott was best known to the Fellows of the Society. For twenty-five years he regularly drew for us the admirable woodcuts and plates which enrich our 'Transactions,' and he did it for so modest a recompense that it might almost be spoken of as, on his part, a labour of love. We shall miss much his facile pencil, and the drawings in the first half of the forthcoming volume will regretfully remind us of "the touch of a vanished hand!"

There are three other Fellows who passed away during the year, of whom I regret to be unable to find any record beyond the simple notification of their deaths. *Mr. Malim Sharman*, of Birmingham, died on the 10th of March. He was Surgeon to the Hospital for Sick Children at Birmingham. He became a Fellow of our Society in 1862. *Dr. H. A. Aldred*, of Westbourne Park, died on May 21st. He was a comparatively young Fellow of our Society, having joined us in 1878. And on August 28th died *Mr. Wykeham Lydall*, of Mecklenburgh Square. Since 1869 Mr. Lydall had been one of our Fellows.

And, here, gentlemen, I should, following the custom of

past years, have concluded these brief obituary notices of those whose loss we deplore, but on the 8th of January of this year, and so still within my presidency, died one of our Fellows who was at the same time one of my most valued personal friends, and so, by the courtesy of my successor, I am permitted this evening to place one more wreath on his recent grave. *Henry Thomas Lanchester* was born at the village of Yoxford, in Suffolk, in 1838; he was educated at the North Walsham Grammar School, and after serving the apprenticeship usual in those days prior to beginning hospital work, entered at St. Bartholomew's in his twentieth year. During his whole studentship he highly distinguished himself, and took at its close the M.D. of the University of London and the M.R.C.S. After leaving St. Bartholomew's he filled for three years the post of resident Medical Officer at the Victoria Park Hospital for Diseases of the Chest, and then went to Croydon, the scene of his future life-work, at first as assistant to Dr. A. Carpenter and Mr. Whitling, but after no long period as a partner in that important firm. In Croydon his professional career was one of uninterrupted success, and from first to last he was one whom all delighted to honour. He was Surgeon to the Croydon Hospital, Surgeon to the 1st West Surrey Volunteer Corps, Hon. Secretary and then President of the South-eastern Branch of the British Medical Association, Member of Council of the Epsom College, and only last year was elected a Member of Council of this Society, of which he had been a Fellow since 1876. Beyond these and other professional appointments he did much good public work at Croydon, as Vice-chairman of the School Board, and as member of Committee of nearly all the more important local charities and institutions. Indeed, I fear there can be little doubt that the earnest attention he gave to his many public appointments, in addition to the unceasing claims of his extensive practice, had so overtaxed his physical strength, at no time great, that it was largely responsible for that sad failure of rallying power which

occurred when his fatal illness came. He was at work, busy as usual, on the 2nd of January, and on the 8th he died from an attack of pneumonia. As a medical man he was an accurate observer, a careful therapeutist, and most painstaking and thoughtful in the general care of his patients. He was at once an accomplished physician and an able surgeon, and in our own specialty had knowledge and tact far above the average; and his personal character was as lofty as his medical acquirements were considerable. Truth and rectitude, a kindly courtesy, and a generous disposition were his uniform characteristics. I would, indeed, that my pen were an abler one, to do full justice to Lanchester's life and character, for both were among the most perfect I have known. I can but say, and what I say will, I think, be re-echoed by all who knew him, patients and friends, fellow-townsmen and fellow-practitioners, that he ever wore the "white flower of a blameless life," that he leaves behind him a spotless reputation, and that his memory will be cherished while memory lasts. His funeral was a remarkable indication of the esteem in which he was held. There was a general cessation of business throughout Croydon, and the attendants at the ceremony included not only his more immediate relatives and deputations from the various public bodies with which he had been associated, but many thousands of sorrowing friends from far and near.

Before quitting this chair, gentlemen, two or three duties yet remain for me to fulfil. In the first place, I have to thank most sincerely all the Fellows of the Society for that uniform kindness and forbearance which they have shown me during the pleasant and not unprosperous two years in which it has been my high privilege to preside at its meetings. And secondly, I wish gratefully to acknowledge the courteous help I have received from the members of the Council, and the officers of the Society, and more especially, and to an extent no words of mine can adequately acknowledge, from our able and untiring secretaries. And yet further, and lastly, I have to con-

gratulate the Society on the acceptance of the office of President by the gentleman who succeeds me. Dr. Potter is known to all here as a graduate of a famous University, as the Obstetric Physician and Lecturer on Midwifery at one of our London schools, and as having been for the three years during which he has held the office our most admirable Treasurer. In yielding this seat of honour to him, I am assured that I shall be followed by a gentleman who is an experienced obstetrician and gynæcologist, who has an accurate knowledge of the affairs of the Society, and who has its interests thoroughly at heart. In quitting, gentlemen, this chair to-night, I shall carry with me a hundred pleasant reminiscences tempered only by the sincere regret that my services have been so inadequate to the Presidency of this great Society.

It was proposed by Dr. Graily Hewitt, "That the best thanks of the Society be given to the retiring President, Dr. Henry Gervis, for the efficient manner in which he has presided over the meetings of the Society during his term of office and that he be requested to allow his interesting address to be printed in the next volume of the 'Transactions.'"

Dr. Playfair said he had great pleasure in seconding the motion made by Dr. Graily Hewitt. The acclamation with which it had been received rendered it, however, quite unnecessary for him to do so except as a mere matter of form. The unfailing urbanity and courtesy with which Dr. Gervis had presided over the Society had been a matter of common remark, and in the Council, where things did not always run with unruffled smoothness, there had been no want of firmness when that was wanted. Having the interest of the Society much at heart he could wish it no better fate than that its future Presidents should model their conduct on the example Dr. Gervis had set before them.

The motion was carried by acclamation, and the President briefly returned thanks.

Dr. WILLIAM DUNCAN proposed "That the best wishes of the Society be given to the retiring Treasurer, Dr. Potter, for his zealous and untiring exertions in the interests of the Society." Dr. Duncan did not think it necessary to add anything to the above words, as many of the Fellows present were better acquainted with Dr. Potter's good qualities than he was, still he would like to remark that, considering the excellent Treasurer's report which has just been read, and looking at the fact that the gentleman who next occupies the Presidential Chair will find the duties exceptionally difficult, coming, as he does, after one who has filled the post with unusual ability and vacates it to the universal regret, the Society is to be congratulated in having obtained Dr. Potter as its new President.

The motion was seconded by Dr. HORROCKS, and carried.

It was proposed by Dr. JOHN WILLIAMS, seconded by Dr. HUNT, and carried, "That the meeting also expresses its best thanks to the retiring Vice-presidents (Drs. Brunton, Galabin, and Godson), and to the other retiring members of Council (Drs. Aveling, Bate, Bridgwater, Burchell, Madge, Seton, and Strange)."

Dr. GODSON returned thanks.

MARCH 4TH, 1885.

J. B. POTTER, M.D., President, in the Chair.

Present—46 Fellows and 9 visitors.

Books were presented by Dr. Belluzzi, the St. Bartholomew's Hospital Staff, and the Council of the College of Physicians of Philadelphia.

Edgar A. Hughes, L.R.C.P. Lond., and Philip J. Cook, M.D., were admitted Fellows of the Society.

William John Beatty, L.R.C.P. Ed. (Stockton-on-Tees); William Gowans, F.R.C.S. Ed. (South Shields); J. Oswald Lane, B.A., M.B. Cantab. (Northampton); Henry Ambrose Lediard, M.D. (Carlisle); and John Arthur Irwin, M.D. (New York), were declared admitted.

The following gentlemen were elected Fellows:
Dominick A. D'Monte, L.R.C.P. Lond., and Frederick Charles Wallis, B.A., B.S. Cantab.

DISTENSION OF UTERUS FROM PARTIAL OBSTRUCTION OF CERVIX.

DR. GALABIN showed the uterus of a woman æt. 61, in which distension of the body with muco-sanguineous fluid was found in association with a partial obstruction of the cervix. The patient died six days after operation

for cancer of the breast. The uterus was removed entire. On laying open the vagina it was noticed that the cervix was replaced by two minute orifices, from which sanguineous fluid could be squeezed. On laying open the body of the uterus it was found to contain about two ounces of fluid. This was thick, somewhat resembling the treacley fluid seen in cases of retention of menses, but more slimy, from greater proportion of mucus. The canal was obstructed by a median septum about three quarters of an inch long, occupying the lower part of the cervix and the summit of the vagina. From its symmetry it appeared to be a congenital septum, and not the result of adhesion. A surgical probe could be passed along the canal on either side, but not the uterine sound. The woman had been married twice, but had her first and only child at the age of forty-six. This was stillborn at full term. There was no history as to the character of menstruation.

Dr. Galabin said that it was sometimes declared that no post-mortem evidence was ever found of distension of the body of the uterus in consequence of narrowness or flexion of the canal. He had himself been disposed to believe that unless the obstruction were absolute, the uterus always became hypertrophied to overcome it, like the bladder in stricture of the urethra, and did not allow any accumulation sufficient to be demonstrated post-mortem. But he thought that there were exceptions, especially after the menopause, when the uterine walls were probably weaker and less ready to contract. He thought the present case might be compared with one which he had met with of an elderly woman with retroflexion and partial descent of the uterus. On pressing the fundus, about an ounce of pus could be squeezed out through the cervix, and this pus repeatedly again collected. He was inclined at first to think that there was cancer of the interior of the uterus, but a cure was obtained by frequently emptying the uterus for some time, and supporting it by a Hodge's pessary.

Dr. Herman thought Dr. Galabin's specimen was one of great interest. It was to be noted that the obstruction was congenital and therefore must have existed throughout menstrual life. Information as to whether the patient suffered from dysmenorrhœa or not would have been important. The case related by Dr. Galabin in which pus was squeezed out of the retroflexed uterus of an old woman, was a parallel one to that put on record by Kiwisch, and which he (Dr. Herman) believed was the only recorded piece of post-mortem evidence to show that flexion could obstruct the canal of a uterus which was free to move—a case in which the uterus of an old woman was retroflexed and contained fluid which ran out when the body of the uterus was lifted up. In both Dr. Galabin's case and that of Kiwisch, the uterus had undergone senile atrophy.

INVERTED UTERUS.

Dr. Herman exhibited a specimen of recent puerperal inversion of the uterus. The history of the case was as follows:—The patient, æt. 31, had had four children. In her previous labour the placenta was said to be adherent, and was manually removed. Labour began about 9 p.m. on February 3rd. At 9.30 a.m. on February 4th the os uteri was about the size of a crownpiece. At 11.30 a.m. it was much the same. At 3 p.m. the os uteri was fully dilated, but the pains had ceased. At 3.30 the pains returned, and Mr. W. Todd, the medical attendant (by whom these particulars have been furnished), was sent for, and at about 4 p.m. the child was born; the head presented. The cord was twisted round the shoulder and round the groin. The child was expelled rapidly, and during its expulsion the cord was tense, so that Mr. Todd had to slip it off the shoulder in order to allow the passage of the child. After the ligature of the cord and removal of the child, Mr. Todd felt the placenta in the vagina. He put his hand on the abdomen, and was unable to feel the uterus in its natural place. Below and behind the symphysis he felt the solid mass of the uterus, the upper

part of which struck him at once as unusually flat, and on closer examination he noticed a depression in the centre of the flat surface. Copious hæmorrhage then took place and the patient fainted. Mr. Todd inserted his hand in the vagina and discovered the placenta adherent to the inverted uterus. He removed the placenta and tried without success to reduce the inversion. Dr. Wheeler, of Bow, was then called in, and with his aid further attempts at reduction were made, but without result. Dr. Herman was then sent for, but the patient died about 9 p.m., just before his arrival. The uterus was removed on the following day; it was completely inverted.

Dr. Herman thought that the inversion was probably produced by the tension of the cord and consequent traction on the placenta, which Mr. Todd described as being present during the birth of the child. The cord was rendered relatively short by being twisted round the child. Of inversion from this cause (traction on the placenta by a short, or relatively short, cord), there were numerous instances on record.

The PRESIDENT then delivered his Inaugural Address.

INAUGURAL ADDRESS.

GENTLEMEN,—My first duty on taking the chair to-night is to thank you most sincerely for the honour you have conferred upon me in electing me your President—to those who specially practise in this branch of medicine the highest honour they can aspire to. But this confidence that you have so generously reposed in me, and which I so highly appreciate, brings its responsibilities, and looking at the series of distinguished men who have preceded me in the chair, I may well feel trepidation in attempting to follow them. When I received the intimation that it was intended to propose me for nomination, I confess I was taken by surprise, as I had anticipated that the vacancy on this occasion would be filled by the appointment of a gentleman who would have discharged its duties most admirably, and I am sure have been most acceptable to all the Fellows—I allude to Dr. Gustavus Murray; but as he was not desirous of adding to his engagements at the present time his nomination was deferred, agreeably to his wishes. We may still hope on a future occasion to welcome him to this chair, and I am sure then that his appointment will be hailed by you all with acclamation. The admirable way in which you have been presided over during the last two years, the great urbanity combined with judicial firmness and excellent business qualities of Dr. Gervis, render it the more difficult for me to approach to his standard of excellence, though I may strive to imitate it. It is a source of comfort to me, however, to feel that the continued prosperity of this Society, which we all have so much at heart, is

more dependent upon the work of individual Fellows than upon the temporary occupant of this chair.

In the limits of this necessarily brief address I propose to inquire how far we have carried out the objects for which this Society was founded, now some twenty-seven years ago. These objects may be said to be—1st. Political and social; 2ndly. Scientific. As to the first of these, the position of the obstetrician has been greatly improved, and the importance of our subject more fully appreciated by the profession and the public. In addition to the position we hold among learned and scientific bodies, we have now, that which was so long desired, a Representative in the General Medical Council, a former President of this Society who enjoys the confidence of us all. The subject of the proper education, examination, and registration of midwives, has been so often before you that I hesitate again to refer to it, but the importance of the question compels me. Spoken of as a pressing necessity at the Inaugural Meeting of the Society in 1859, though meetings have been held, schemes drawn up, and deputations have gone to the Privy Council, yet the midwife still continues as before, imperfectly educated, unexamined except voluntarily, and unregistered. Our own examination has steadily and largely increased in numbers and importance during the last few years. Commenced in 1872, in the first eight years 47 names only were placed on our register; in 1880, the number added was 22; in 1881, 39; in 1882, 37; in 1883, 53; in 1884, 49; during the last two years 127 candidates having presented themselves for examination. Steadily increasing as these numbers are, and to the extent of somewhat taxing our Examining Board, who do their gratuitous work most cheerfully, it is a mere drop of water out of the large number of women, 11 to 12,000, who are practising throughout the United Kingdom, without check or qualification. Hitherto our efforts for State interference have not been effectual, and the great pressure of other matters in Parliament has prevented of late our approach-

ing the Government as we should otherwise have attempted, and which sooner or later must be done. Perhaps as we now have a Representative in the General Medical Council, it might be fitly brought before that body through him. The position of the midwife must be improved, not only in the interests of the suffering poor, but of the midwife herself and the hard-worked general practitioner. It is terrible to think that an intelligent woman attending between four or five hundred cases of labour in the year is scarcely able to earn a bare subsistence by her work. We cannot be surprised that she should too often be tempted to increase her scanty earnings by resort to immoral and illegal practices. If the condition of these women could be ameliorated there is no doubt that they would command better fees, and relieve the hard-worked practitioner of a most unremunerative and fatiguing part of his work; when called in, as he frequently would be in cases of difficulty, he would be able to use his skill not worn out by a long and tedious personal attendance, and receive the remuneration to which he is fairly entitled. Thus in all the poorer class of cases he would become the consultant to the midwife instead of her competitor.

Another point that has often been touched upon, but remains much as it was, is the insufficiency of the lectures given on the subject of midwifery and the diseases of women to the students at our hospitals, the contrast between the long winter course of a hundred lectures in our northern schools, with the short summer course of from thirty to fifty in our metropolitan hospitals. Now, while admitting the impossibility of adequately doing justice even to the elements of our subject in so short a course, I do not see my way to the longer one, our students being already heavily lectured to almost beyond their endurance; but that we might have two courses taken in the third and fourth summers respectively, the subjects to be different might be managed. Many of us now adopt this plan voluntarily, and some of our students take advantage of it, but I think it would be well if this

were made compulsory. In concluding what I have to say on the subject of medical education I may mention that at a recent meeting of the Royal University of Ireland it was decided to confer a new degree—M.A.O., Magister Artis Obstetricæ, under certain conditions, to all graduates of the University holding the diploma in obstetrics. This is the first time that our subject has been recognised by a University as worthy of receiving a special degree.

Secondly, with regard to the main object for which this Society was founded, viz. the promotion of knowledge in all that relates to obstetrics and the diseases of women and children, we may look back with pride on the mass of valuable material accumulated in our published volumes, now twenty-six in number; a rich mine which will well repay the industrious reader and worker. But though much has been done, much remains to be done; and if I may venture to take this opportunity for making a few suggestions as to our future work, I would draw attention to two or three points of some importance. One of the great objects of this and kindred societies has been to collect cases and facts, and by the accumulation of large numbers of these to get them arranged and discussed with the view of arriving at truth. The collection of cases as a work of the highest value was well alluded to in the address of the President at the first meeting of the Society, and he referred in terms of eulogy to the collections of Mauriceau, Giffard, Lamotte, Smellie, and others. In that same volume was printed a form of obstetric case-book for general use, and it was hoped that in time many of these books with their short fresh records would be brought together, and thus a series of thousands of cases would be collected for arrangement, examination, and comparison. This has yet to be done, and the experience of twenty-six years ought to have brought forth ample fruit. The same remark applies to the collection of cases of the various diseases of women, both common and rare. In our twenty-five volumes we have only eleven collections,

eight of obstetric cases and three diseases of the puerperal state. Next, let me dwell for a few moments on the great importance of more knowledge of the natural history of disease. The commonest diseases, how little we know of their natural course and duration; even in natural labour how little is known of the causes of the various presentations and positions of the child, the true mode of detachment of the placenta and membranes, and the behaviour of the uterus after the completion of labour. It seems but the other day that it was customary after wating a short time to drag away the placenta in the inverted umbrella fashion; now we have the method known as Crede's, and we are all indiscriminately aiding nature by expression, often, no doubt, to the detriment of the patient. Some interesting papers by Dr. Barbour in the 'Edinburgh Medical Journal' the latter part of last year, have thrown some light on this obscure subject. Again, with regard to abortion, why in one case the ovum is retained, as one may say, by a slender thread, and abortion takes place on the smallest provocation, yet, in another, if we wish to induce it in the interest of the patient, how difficult, slow, and sometimes almost impossible it is. The support or not of the perineum—even the application of a binder or a pad—all these are differently treated and thought of by different practitioners. Again, of the commonest diseases of women, such as cancer and fibroid tumours, much of their natural history has to be made out, and this can only be done by the careful record and collection of large numbers of cases. Unfortunately the life of man is short, while to watch cases of disease to their natural termination takes many years, and the humble record of such cases is not attended with the same interest as a brilliant operation or some rapidly successful method of treatment, yet this laborious and painstaking record may be of more value to the human race than the more successful and brilliant case. Again, the work of recording cases as they continue from day to day can be done by anyone, no matter where his practice may be, and it has

the advantage of compelling him to more accurately diagnose and observe, thereby not only adding material to the common stock, but at the same time greatly improving his own resources. We have examples in the Society of men living in obscure country places who have done much solid and good work in this way, although the immediate results have not been so striking. I could not take a better example than that of the late Dr. Uvedale West, whose little unpretending work on cranial presentations and positions is one of the most valuable contributions to the subject in this country. The materials for this were culled in a quiet village in Lincolnshire, and to use the words of the author in his preface, "it has rendered interesting what would otherwise have been a dreary and thankless monotony of ordinary midwifery cases, varied only by the longer or shorter periods stolen from the night's rest, and enlivened chiefly by village gossip at the time and by ingratitude afterwards." I would especially impress this point, our Society consisting so largely of those who are engaged in general practice, for it is to them we specially look for help. Many cases that are seen but once or twice by the physician, remain for months or years under the care of the family attendant, who watches their progress from day to day, seeking with unremitting care to alleviate their sufferings until their termination. For want of this more accurate knowledge of the natural history of disease, how often our practice becomes empirical and unsatisfactory. How futile, to undertake an operation with a higher mortality, and with a more rapidly fatal termination, even if successful, than if the case had been left to nature.

Lastly, a few words as to our position as specialists. In his interesting Gulstonian Lectures delivered last year, Dr. Clifford Allbutt made some rather trenchant remarks on the excessive specialism of our department, and especially in relation to the subject of neurosis. Though I think many of his shafts, aimed fairly enough, missed their point; we may yet take to ourselves what advantage we can

from them, and I cannot do better than quote the wise remarks of Dr. West in his address in 1877, where he speaks of the exact position which the members of this Society should endeavour to secure for it. "Not that of mere specialists who have cantoned out for themselves a little province in the scientific world, beyond which they do not care to travel, fancying themselves in an intellectual Goshen, and that they always have light in their dwellings while all is dark around; but rather that of sound physicians and able surgeons, who, for the public good, have superadded to their general knowledge a particular acquaintance with certain departments of our art." There has, undoubtedly, been of late a great tendency to the excessive local and surgical treatment of diseases of women, to the exclusion in a great degree of their constitutional aspect; a danger of treating the disease and not the patient. To avoid this charge of a narrow specialism it will be well in every way to enlarge the scope of our work. We have certainly paid too little attention to the diseases of the breast; with the exception of a paper on Mammary Inflammation by Mr. Nunn, in an early volume, and a short paper on Eczema of the Nipple in the twenty-second volume, this important branch of our subject has been entirely neglected. Also the disorders of lactation, and the effects on the uterus and other organs, and on the general health of the patient, from too little or too prolonged suckling (the former too often a fault of the rich, the latter of the poor), its importance in the production or prevention of subinvolution and other troubles. The diseases of the nervous system in women, how far produced by, or producing uterine disease, may well merit our careful study and attention; the introduction of the Weir-Mitchell method of treatment into this country by Dr. Playfair is a step in this direction. These are but a few of many questions that may fairly be brought under our notice here.

And now, gentlemen, in bringing these brief and imperfect remarks to a close, while gratefully acknowledg-

ing the work of the past, yet recognising how much still remains to be done in the future, let us stimulate ourselves to new efforts, and striving to continue in the footsteps of the great men who have preceded us, not grow weary on the wayside, but press forward to the goal with a determination that our Society and its work shall be as hitherto in the van not in the rear of medical progress.

> "At least, not rotting like a weed,
> But having sown some generous seed,
> Fruitful of further thought and deed."

ON EXTIRPATION OF THE ENTIRE UTERUS.

THE SECRETARY then read an abstract of Dr. W. A. Duncan's paper on extirpation of the entire uterus, the discussion on which had been adjourned.

Sir SPENCER WELLS said as he had only once excised a cancerous uterus, and had not operated by the vagina, he should not occupy the time of the Society very long. But the extreme interest of the subject (especially to the general practitioners who formed so large a proportion of the Fellows, and who saw the disease in its early stages, when a correct diagnosis was of the utmost importance, and in the later stages when hopeless suffering called for the most patient care) made it almost a duty to ask if the speakers at the meeting when Dr. Duncan's paper was read had not been too decidedly adverse to the principle of the operation of removing the entire uterus when the seat of cancer. Even Dr. Duncan's admission that when the disease is limited to the cervix we are not justified in excising the whole of the uterus, because supra-vaginal amputation gives equally good results at much smaller risk; and his opinion that total extirpation should be limited to cases of sarcoma and carcinoma of the body of the womb and of the mucous membrane of the cervical canal, were met by arguments tending almost to condemn the operation in all forms and degrees of uterine cancer. Perhaps Dr. Williams hardly went so far as this; but Mr. Thornton went even further, condemning total excision either by the abdomen or the vagina, as well as the use of the curette, and limiting surgical treatment to amputation of the cervix and the use of chloride of zinc. Mr. Doran's interesting remarks on the network of lymphatics which surround the cervix were confirmatory of the fear

that, even in the early stages of uterine cancer, the elements of the disease may have been carried to the obturator gland, or beyond the possibility of removal. Dr. Playfair, who spoke last, even more strongly condemned the principle of the operation. In most cases, he said the "diagnosis was uncertain until it was too late to operate" and that "removal of the diseased tissue and the application of chloride of zinc" affords as much relief as excision of the whole uterus at a much smaller risk. Then referring to the case in which he (Sir Spencer Wells) excised an entire cancerous gravid uterus: Dr. Playfair said—"If the patient had been let alone, or Sims's operation done, her expectancy of life would have been as good, to say nothing of the risks of the operation." The fact is this treatment had been tried and failed. The diseased part had been scraped away and chloride of zinc applied without any relief to pain or lessened discharge; and it was only after the failure of Sims's treatment, and careful consideration with Dr. Graily Hewitt of the risk of leaving things alone, or of inducing premature labour, that the operation was done. It was very successful so far as recovery went. There was no more pain nor discharge. For several months there was no return of the disease, and the patient was in fairly good health. She died a year after the operation of peritoneal cancer; but her life was certainly lengthened and great relief was obtained. No doubt in some cases the use of chloride of zinc, or bromine, or chromic acid, or the actual cautery, where the patient is not pregnant, may sometimes lead to arrest of the disease for a year or more. But in many cases, probably a considerable majority, no more good, perhaps less good, is done than by simpler applications. On the table there was a specimen from the Museum of the College of Surgeons of the result of Sims's treatment carried out by Sims himself. He scraped away all the diseased structure with the utmost care, applied chloride of zinc, and the slough which came away represented nearly the whole uterus. The patient only lived four months after-

wards, and in as much suffering as if the disease had run its course unchecked. Sims's treatment, and amputation of the cervix, were about on a par with the removal of only the diseased part of a cancerous breast, rather than of the whole breast, which Mr. Pemberton had recently advocated. Excision of the entire uterus might be compared with amputation of the whole breast; but so far as a real cure went, taking Sir James Paget's definition "that the patient should live for more than ten years free from the disease, or with the disease stationary," we could not expect this oftener after removal of the uterus than of the breast. Yet Sir James Paget says of the result of removal of a cancerous breast, "I am not aware of a single clear instance of recovery." He, however, and others, believe that by removing a cancerous breast they prolong life and lessen suffering; and recent experience of vaginal extirpation of the cancerous uterus —especially the results of Olshausen and Schroeder—prove that we may improve the mode of operating and hope for greater success in the future. There is still much to learn as to the mode of procedure—the antiseptic preparation of the patient; irrigation during operation; reflected electric light; compression of the aorta; the vaginal incisions; separation of the bladder; avoidance of the ureters; ligature or forci-pressure of bleeding vessels; the use of the elastic ligature, peritoneal sutures, drainage, plugs of iodoform gauze, and similar details which have still to be studied. But with practice on the dead body, and scrupulous care in every operation on living women, it is to be hoped that at least as good results may be obtained here as in Germany, and that condemnation of the principle of the operation will not be the verdict of the Obstetrical Society. Have we sufficient facts before us to justify such a verdict? Admitting that abdominal extirpations have resulted in a mortality of 72 per cent., and vaginal extirpations of 28 per cent., is it to be supposed that increasing experience and improved methods will not lead to diminishing mortality? Admitting that

recurrence of the disease within a few months, or at most in from two to five years, has hitherto been the rule, may not a more accurate diagnosis, earlier operations, and improving methods lead to better results—not only to a lower death-rate, but to a retarded recurrence, and sometimes to complete recovery?

Dr. Graily Hewitt expressed his concurrence in the remarks of Sir Spencer Wells to the effect that at present the data are insufficient to determine the value of extirpation of the uterus in cases of cancer of that organ. As to removal of the cervix in cases of epithelioma he considered the value of this operation was not open to question, but the treatment of cases where the disease had invaded the organ higher up was still open to consideration. As regards extirpation the case operated on by Sir Spencer Wells was one in which he had shared the responsibility of advising the operation, and he thought the result justified the opinion given. As regards this particular case it must be recollected that the patient was pregnant, and extirpation of the gravid uterus had not then (three years and a half ago), so far as was known in this country, been performed. The patient was daily becoming worse, and it was considered that a better chance would be given of preventing recurrence if, which fortunately occurred, she survived the operation. The results of removal of the uterus, which had then begun to attract attention, gave encouragement to the trial of extirpation of the uterus for cancer, and so the operation was decided on and performed. As regards the general question of the treatment of cancer of the uterus he sympathised in Dr. Priestley's hope that some means might be found of mitigating or preventing this disease. So far as operative measures were concerned he thought all experience justified the view that whenever cancerous disease could be removed it was proper to remove it. One point further he would dwell upon—the exceeding importance of an early diagnosis. It was too often the

case that the disease was found to have obtained a firm hold before an examination had been made or even suggested; it was necessary that the earliest symptoms of the malady should be carefully looked for, and means taken without delay to substantiate its presence or absence.

Dr. PRIESTLEY said that when he came to hear the reading of the paper and its discussion at the previous meeting he did not come with the intention of speaking —he had not experience enough of the operation for the entire extirpation of the uterus to speak authoritatively concerning its propriety. He had the most profound compassion for the sufferers from uterine cancer, and he came to the meeting almost hoping that as the result of recent improvements the dangers of operating on such cases were diminishing, and that in the future one might look forward with greater confidence than heretofore to a successful issue.

Like others who paid attention to the special diseases of women, he saw in practice many cases of uterine cancer in its various forms, and he was disposed to think that its frequency was underrated in the published statistics concerning it. Tanchon in his well-known work on 'Cancer,' estimated uterine cancer as being the cause of mortality in 1·6 per cent. among women. Sir Jas. Simpson reckoned the mortality at 2·2 per cent., or twice as much as Tanchon. The figures in Dr. Duncan's paper gave the frequency of cancer as 3 per cent., but this was only in reference to cases of uterine disease examined by Schroeder, and therefore it did not touch the question of absolute frequency. These figures to his mind did not adequately represent the frequency of the disease, although it might be that seeing chiefly selected cases in consultation, they seemed more common than they really were, in regard to the whole community. He was certain that in some localities there were more cases of cancer in proportion than in others. In a secluded village in Scotland near where he spent his autumn vacation cancer in

its various forms was very common, and it and tuberculosis were the chief causes of death there.

Cancer was so pitiless and distressing, and a disease so much dreaded, that all must welcome a remedy, however severe it might be, if such remedy gave a reasonable chance of recovery at the time and of immunity for the future. And it might well be said that the operation for extirpation of the uterus, although perilous, was not out of proportion to the gravity of the disease for which it was proposed. It was not a great operation for a minor ailment, which a satirist had characterised as apparently undertaken more for the benefit of the surgeon than of the patient. Concerning the propriety of an abdominal section for an ovarian neurosis, such as the President had alluded to in his address, there might be, and was, a considerable difference of opinion. This was an ailment which might get well spontaneously and sometimes unaccountably, even when of long standing; but the same could never be said of uterine cancer if the diagnosis was correct. Cancer could not, even by accident, admit of spontaneous cure like some rare cases of ovarian cyst, which were cured by accidental rupture.

All intelligent attempts, therefore, to root out the disease even by severe operations should be viewed with an earnest desire for their success.

The propriety of extirpating the entire uterus depended on favorable answers being given to two questions: 1st, can the uterus be removed with a reasonable expectation of safety, always remembering the gravity of the disease for which it is proposed? And 2ndly, is the probability of a speedy return of the disease so great that it becomes scarcely worth while to subject the patient to so severe an operation?

He feared it must be admitted that the answer to be given to the first question was not so satisfactory as might be wished. According to Dr. Duncan's instructive paper which had originated the discussion, the death-rate after abdominal extirpation was 72 per cent., and by vaginal

extirpation 28·6 per cent. Hegar and Kaltenbach stated the results of abdominal extirpation to have been 26 recoveries in 89 cases, or a mortality of 71 per cent. Sänger found that in 133 completed cases there were only 89 recoveries. The mortality, therefore, from all available sources was very large, and some of those best qualified to express an opinion, and who had spoken in the debate, were adverse to the operation, at least by abdominal section.

Turning to question No. 2, the reply was not more favorable. Dr. Duncan's figures showed that only 33 per cent. were free from recurrence of the disease two years later; and of Sänger's cases, the average return in seven was 4·2 months, while in six cases where the patient had survived the operation the average duration of life was only 14·1 months.

He was struck by a remark made by Dr. John Williams, that when the disease recurred after operation it was placed at an enormous advantage. For, beginning in the cicatrix, it spread at once to the deeper tissues, and the operation, therefore, might be in a sense the means of expediting the disease and bringing the severer forms of suffering upon the patient earlier than if the case had been allowed to take its natural course. He felt sure this was true in reference to the application of the actual cautery to the cervix for destroying the cancerous surface. He had seen instances, in conjunction with Sir Spencer Wells and others, where, although the cautery seemed immediately to relieve the pain, yet it set up cellulitis in the surrounding parts; this soon became the seat of cancerous deposit, and the disease thus progressed more rapidly in the long run. On the other hand, he had seen many cases where carefully managed palliative treatment had not only prolonged the life of the patient, but had warded off the severer sufferings until the patient mercifully died from exhaustion and with little pain.

In the light of present experience, therefore, he was not disposed to recommend entire extirpation of the

uterus for cancer, although he would gladly welcome a greater success in the operation if this were attainable. As an instance of what could be done by palliative means he might mention that a case had been sent over to him last summer which had been operated upon by Professors Müller and Hegar abroad. A tumour had been removed from the cervix which was of so doubtful a nature that the propriety of removing the whole uterus was discussed. The operation had been performed so skilfully that scarcely a trace of it could be seen, and the appearances locally were so promising that at first it was hoped the diagnosis of malignant disease might prove to be unfounded. Before three weeks had passed, however, fresh growth sprung up, and although it was partly checked by the actual cautery it soon filled the upper part of the vagina. Sir Spencer Wells saw the case in consultation, and might be surprised to hear that the patient was not only living, but in comparative comfort, solely by the aid of palliatives. Dr. Cleveland kindly shared the attendance with him, and the local applications consisted of tannin, sulphate of zinc, and iodoform in powder. This had the effect of restraining the growth, and produced no pain, while the slight discharge there was was devoid of fœtor.

The cases in which operative interference was desirable were instances of epithelioma which were seen early, and where there was thus a chance of entirely removing the disease by amputation of the cervix. He had seen such cases where there was an entire immunity from recurrence of disease after many years. Possibly also in some instances of more advanced epithelial growth it might be justifiable to scoop out the soft mass of diseased tissue, and make some local application by way of palliating the profuse and exhausting discharges; others he should be disposed to leave alone, so far as operations were concerned, for if so little good was to be gained as appeared from present statistics, even the mental distress and perturbation which many sensitive patients experienced in

view of an operation should count for something, which it would be well to spare them.

Possibly further improvements might eventually render the operation for the removal of the uterus less hazardous than now, and early diagnosis lessen the tendency to recurrence of the disease. If this were not found to be the case he would not despair in the future of finding some other mode of successfully combating uterine cancer. Since the germs had been discovered of other deadly diseases, and notably of tuberculosis, and some sort of pathological relation had been observed between tubercle and cancer, it might be that we should some time or other treat cancer by other than surgical means. The medical side of the question at least should not be lost sight of, and all should strive to do their utmost to remove the ban which seemed at present to rest on those who, once in the category of cancer patients, might be forcibly reminded of Dante's graphic words, "All hope abandon ye who enter here."

Dr. GALABIN said that the great majority of speakers appeared to agree with the opinion which the author had arrived at after experience of his two cases, that in ordinary cases of cancer of the cervix it was not desirable to extirpate the whole uterus. He had himself so decidedly held that view from the first that he had never undertaken or recommended the operation for that disease. Cancer of the cervix might begin at any point, but in the great majority of cases it began near the external os. Thence it ascended the cervical canal so far that slicing off the cervix with an écraseur almost always left some of the growth behind on the surface of the canal. But it spread even more rapidly over the vaginal cervix, and when the uterus was extirpated the line of section would be nearest the growth at the surface of the vagina. It was not shown that in total extirpation any wider margin could be given here than in the supra-vaginal amputation. The latter operation could be performed even when the disease

had just reached the vagina, and even if it were necessary to open the pouch of Douglas the operation would still be less dangerous than total extirpation.

His experience of the use of the chloride of zinc had been more favorable than that of Sir Spencer Wells. He had been accustomed not to remove the cancer piecemeal according to Sims's plan, but to excise in one piece and apply the solution of chloride of zinc ten or fourteen days later. In general he had found the line of section pass clear of all manifest disease. But in several cases in which this was not so, and in which, therefore, the primary operation was obviously inadequate, the results had been good. In two such cases the patients had returned after more than two years without any recurrence of the growth, but with retention of menstrual fluid from occlusion of the canal. He did not think that, as regards the chance of eradication by removal, cancer of the uterus could be entirely compared with that of the breast, which was generally carcinoma. He had examined a good many excised cancers of the cervix, and had found the character to be that of epithelioma at the early stage in a considerable proportion, although the growth did not retain its character like epithelioma of the skin, but soon became merged into medullary carcinoma. So, again, cancer of the body of the uterus was generally cylinder epithelioma at the earlier stage, though this also was liable to change its character. He thought that there was a greater chance of eradication in removing an epithelioma than a carcinoma.

In cancer of the body of the uterus he thought total extirpation was justifiable. He had recommended it in several cases at the early stage, but the patients, not suffering much at the time, declined the operation. The diagnosis he considered difficult but quite possible in the early stage, from examination of a fragment of tissue. It was necessary, however, to be accustomed to examine uterine mucous membrane, healthy and diseased. He had not observed any ill-effects such as those feared by Mr.

Thornton from the use of a curette, but had generally used the blunt curette, which brought away only prominent or superficial portions. In one instance, after scraping the whole interior and applying nitric acid, he had found the patient so much improved that her medical attendant thought that the diagnosis must have been a mistake. Eventually, however, the diagnosis was justified.

Dr. EDIS thought that the justifiability of the vaginal extirpation of the uterus was established, the death-rate, 28·6 per cent., being no greater than that of ovariotomy in the early days of the operation. Possibly a large number of the cases might be dealt with by the supra-vaginal amputation, the direct mortality of which was only 7·25 per cent., the tendency to recurrence being no greater apparently than in complete extirpation by the vaginal method. The great drawback seemed to be that cases were not diagnosed sufficiently early. Patients either did not present themselves for examination, or if they did so and the practitioner had any doubt as to the nature of the disease, in place of at once solving his doubts by consultation with one accustomed to deal with these cases, he deferred, too often out of consideration to the patient, hazarding an opinion until later on, when the disease had made such progress that diagnosis was no longer doubtful but treatment hopeless. When we considered the inevitable tendency of the disease to a fatal termination, and that generally one of the most distressing a human being could be called upon to submit to, it was little wonder that patients preferred to undergo the risks of an operation rather than linger on in hopeless agony. With a more widespread knowledge of gynæcology, numbers of cases which now only presented themselves when all rational hope of relief was at an end would be recognised when the disease was in its earliest stage of commencement, and when not only could operative measures prove useful, but the risk of recurrence be very materially diminished.

With the limited material at our command thus far we were certainly not in a position to assert that the operation for removal of the uterus for malignant degeneration was an unjustifiable one, provided it was undertaken sufficiently early in the history of the case. At best our present experience only justified the verdict of not proven.

Dr. WILLIAM DUNCAN, in reply, said his object in bringing the subject forward for discussion would be obtained if the eminent opinions expressed during the debate put a stop to extirpation of the entire uterus for malignant disease of the portio vaginalis. He pointed out the great importance of an accurate knowledge of the pathology of this disease, and said that had he been aware of the valuable researches of Ruge and Veit on the subject he would not have performed extirpation in his first case, in which it was contraindicated and which fortunately recovered. With regard to Dr. Braxton Hicks's objections, he thought the symptoms, combined with the use of the curette, would prevent us from mistaking pregnancy and other stimulant conditions of the uterus from malignant disease, and in recurrent sarcomata diagnosed by the curette Dr. Duncan considered extirpation to be not only justifiable but indicated. He was glad Dr. John Williams agreed with him with regard to malignant disease of the cervix, but he could not go so far as to say that all cases of cancer, whether of the body or cervix, should be let alone. Dr. Duncan thought Mr. Thornton's view that the cellulitis in one of the cases was the result of the direct extension of the malignant growth after examination was proved to be erroneous from the fact that the exudation was reabsorbed, which would not have occurred to a malignant condition. With regard to Mr. Thornton's objection that curetting causes rapid extension of the disease, Dr. Duncan's experience was totally different, as in not a single instance of the many cases he had so treated did he experience anything but good, and if the curetting were done with a view to verify diagnosis

before extirpation, the objection did not hold, for if the condition was one of malignancy no time would be lost before operating. He thought Dr. Bantock's experience of the chloride of zinc paste must be unique, for he had never previously heard its value depreciated, and the cases in which he had used it led him to consider it a therapeutic agent of the greatest value in these cases. Dr. Duncan agreed completely with Sir Spencer Wells in hoping that this debate would not lead us to abandon the operation altogether, at the same time he felt sure that increased experience would never bring the mortality down from 28 per cent. to that which follows supra-vaginal amputation (7½ per cent.) and therefore we must discard extirpation in all cases of cancer of the portio vaginalis. He was glad to have Drs. Graily Hewitt and Galabin's support as to the justifiability of extirpation in cancer of the body of the uterus, and to the great value of the curette in helping one to make an early diagnosis (which was so important).

A vote of thanks to the President for his address was moved by Dr. PRIESTLEY, seconded by Dr. ROUTH, and carried by acclamation.

APRIL 1st, 1885.

J. B. Potter, M.D., President, in the Chair.

Present—42 Fellows and 5 visitors.

Books were presented by the Medical Society of London.

Dominick A. D'Monte, L.R.C.P. Lond., was admitted a Fellow of the Society.

The following gentlemen were proposed for election:—John Frederick Briscoe, M.R.C.S.; Sydney Robert Lidiard, L.R.C.P. Ed. (Hull); Charles Booth Meller, L.R.C.P. Ed. (Newport, Isle of Wight); Charles Stormont Murray, L.R.C.S. and L.M. Ed., and Emil Arnold Praeger, L.F.P.S.G. (Canada, West).

FIBRO-SARCOMA OF CHORION.

Dr. Galabin showed microscopic sections of a tumour of the placenta shown at a former meeting of the Society. It was thought at the time by some of the Fellows that it was a fibroid tumour of the uterus, which had come away with the placenta. This, however, was impossible since it was entirely covered toward the uterine surface by placental tissue. The main tumour was about the size of a human heart, and there were other smaller tumours near it. In all the cases the sections showed that the growth was continuous with the villi of the chorion, and

was covered by an epithelium also continuous with that of the villi. The tumour therefore obviously belonged to the chorion and not to the decidua. The structure varied from that of fibroma to that of sarcoma. In the superficial part it was fibrous. In the deeper portions it consisted partly of spindle-celled, partly of round-celled sarcoma. The latter part would probably be considered malignant if seen elsewhere in the body. A certain portion was made up almost entirely of vessels, of uniform moderate size, about the same size as the vessels in chorionic villi, but all closely united together by the connective-tissue stroma. In answer to Dr. Herman, Dr. Galabin said that he had no doubt that the tumour was purely a new growth. There was no sign of extravasation of blood, except in the deeper parts of the large tumour. The sprouting of the villi from the surface of the growths, and the continuity of the epithelium of villi and growths were also quite distinctive.

SEQUEL TO A CASE OF OVARIOTOMY.

By James Murphy, M.D., B.A.,

SURGEON TO THE SUNDERLAND HOSPITAL FOR WOMEN AND CHILDREN, AND TO THE SUNDERLAND GENERAL INFIRMARY.

The notes of the case which I present to the Society to-night form the sequel to a case of ovariotomy which is recorded in the 'British Medical Journal' for July 1st, 1882, and its history, briefly told, is as follows:

On January 16th, 1882, I performed ovariotomy at Hetton-le-hole (County Durham) on a patient kindly placed under my care by Dr. Adamson of that town, and removed a large multilocular cystoma of the left ovary. On examination the right ovary was found increased to more than double its normal size and divided into several cysts, but it had not yet become pediculated, and the ligament was so very

DESCRIPTION OF PLATE XIV.

Illustrating Dr. Galabin's Specimen of Fibro-sarcomata Chorion.

FIG. 1.—Section near surface of tumour. × 260.

a. Longitudinal section of villus, not showing visible vessels, but springing from surface of tumour.

b. Epithelium on surface of tumour, continuous with epithelium of villus.

c. Epithelium of tumour partly detached, continuous with epithelium of villus.

d. Fibrous tissue near surface of tumour.

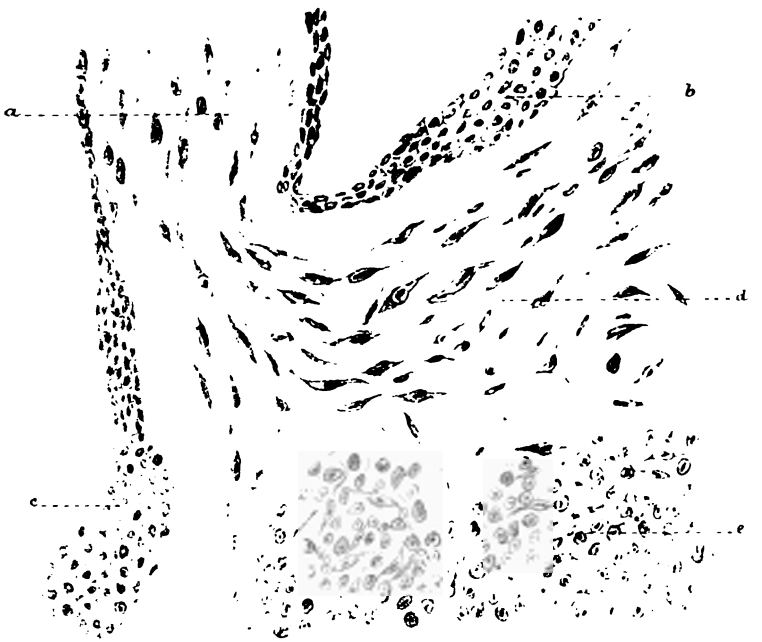
e. Tissue consisting mainly of small round cells, mixed with some elongated connective tissue-cells.

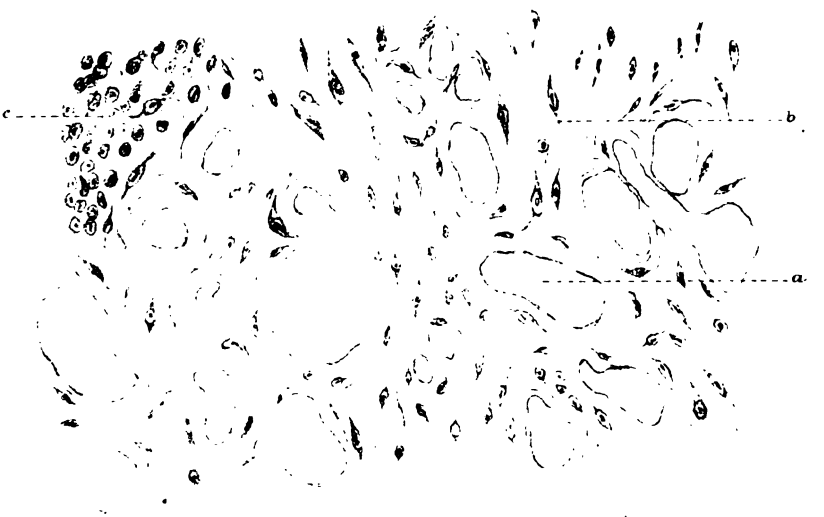
FIG. 2.—Section from deeper portion of tumour, showing dilated vessels × 260.

a. Points to one of the vascular spaces.

b. Fibrous tissue.

c. Tissue consisting mainly of small round cells, similar to that shown at *e* in Fig. 1.





West, Newman & Co lith.

tense that I deemed it inexpedient to remove the tumour with the knife, as it would have been extremely difficult, if not impossible, to secure the stump from hæmorrhage by ligatures, and being suspicious of the cautery I passed two ligatures underneath the ovary and then tied both as tightly as I could on opposite sides of it, pretty much as if it were a nævus,—the ligatures of course being interlaced. I then punctured the cysts and removed as much of the ovary as I could.

The patient made an excellent recovery, never had a bad symptom, and was up on the twelfth day. She menstruated the third day after the operation, and was regular, "same as she always was," for nine months, when she ceased to menstruate and the usual symptoms and signs of pregnancy developed, and on the 9th of June, 1883, Dr. Taylor (Dr. Adamson's assistant) delivered her of a male child (her sixth) after a very short and easy labour.

In the paper already alluded to I have discussed the treatment of the right ovary, and will now only consider how pregnancy occurred in a woman after the complete removal of one ovary, and the ligature and attempted destruction of the other.

It may be suggested that she possessed a third ovary, some cases of which have been recorded, including the remarkable case in which Winkler, of Dresden, performed a *triple* ovariotomy in a patient having three ovaries all diseased (Courty, translation by Agnes McLaren, p. 764). But apart from the great rarity of a third ovary I could scarcely have failed to observe it had it been present. Possibly the ligatures may have slipped, but that I very much doubt, and would offer the following explanation of the occurrence.

The ordinary text-books on anatomy, such as Quain and Gray, give but poor drawings of the uterus and broad ligament, and even such as they are, they do not, I believe, represent the usual relative position of ovaries and tubes, as the tubes are represented superior to the ovaries. Flint relying on Sappey has a similar arrangement, and other

distinguished anatomists too numerous to mention. Now, if we refer back to Ramsbotham a nearer approach to what I believe to be the usual relation is found, but the best drawing with which I am acquainted is that by Richard, and is familiar to you all from having been copied by Playfair, Lawson Tait, Courty, Lusk, and others; another excellent and very similar drawing is found on page 115 of Tarnier's 'Traité de l'art des Accouchements,' fig. 51, "Plis longitudinaux de la trompe utérine," and with these drawings my own experience coincides. That is, that you have the three folds of the broad ligament containing anteriorly the round ligament, in the middle the Fallopian tube, and posteriorly and superiorly the ovary, *i. e.* the ovary is *superior* and posterior to the tube, a fact to which Mr. Alban Doran drew attention at the Pathological Society on December 6th, 1881; but to further satisfy myself on the subject I wrote to my friend and former teacher, Professor Alexander Macalister, of Cambridge, from whom I received the following reply: "There is a considerable range of variety in the place of the ovary and Fallopian tube; in general the ovary is a little above the Fallopian tube. I have not kept accurate statistics, but I should say that this is the case in 75 per cent. of subjects. The ovary changes very little. I believe the Fallopian tube is more variable. Of course the displacement (during pregnancy) of both is considerable, and it depends on surrounding circumstances how the parts settle down afterwards. In the child you will usually find the tube highest, but this alters in adult life; probably the alteration is due to the displacement of pregnancy. I have too little data for determining accurately whether in old virgin subjects the child's condition persists invariably or no. I have certainly usually found the tube highest in subjects with persistent hymen, but they are so few that they form too small a basis for generalisation." Whether the ovary be superior or not in most cases, certainly it was so in the present one; and the ligatures did not include the tube, and what I suggest

is this that the ligatures failed to destroy the ovary, which survived as does the distal portion of the stump, and the tube being intact, it was able in its diseased and mutilated condition to fulfil its functions, as it did, with only a small portion of its tissue being left. In the November number of the 'American Journal of Obstetrics,' a case is related where Battey performed his operation of double oophorectomy with the curious result that his patient not only made an excellent recovery but also became pregnant.

The patient is carefully looked after by Dr. Adamson, and she continues so far in excellent health, and there is no appearance yet of the increased growth of the right ovary (December, 1885).

Dr. HERMAN said there were two points of interest in Dr. Murphy's paper. One was the situation of the ovary in relation to the Fallopian tube. He had himself observed in the dead subject the arrangement of the parts described by Mr. Doran in his recently published work, and by Dr. Murphy in this paper. The other was, as to the effect of ligature of the blood-supply of the ovary, without removal of the organ. A case in which this had been done by Professor A. R. Simpson was recorded in vol. ix of the 'Edinburgh Obstetrical Transactions;' but as that patient had an attack of peritonitis three months afterwards, the case did not teach much as to what might be expected from that proceeding. Dr. Murphy's case was more instructive and seemed to show that it could not be depended upon to arrest the function of the gland.

ON THE CIRCULATION IN THE UTERUS, WITH SOME OF ITS ANATOMICAL AND PATHOLOGICAL BEARINGS.

By John Williams, M.D., F.R.C.P.

The sources of the blood-supply of the uterus are well known, but the manner in which the blood is distributed in the organ has been less minutely studied, and yet its importance from both a physiological and a pathological point of view appears to be not inconsiderable.

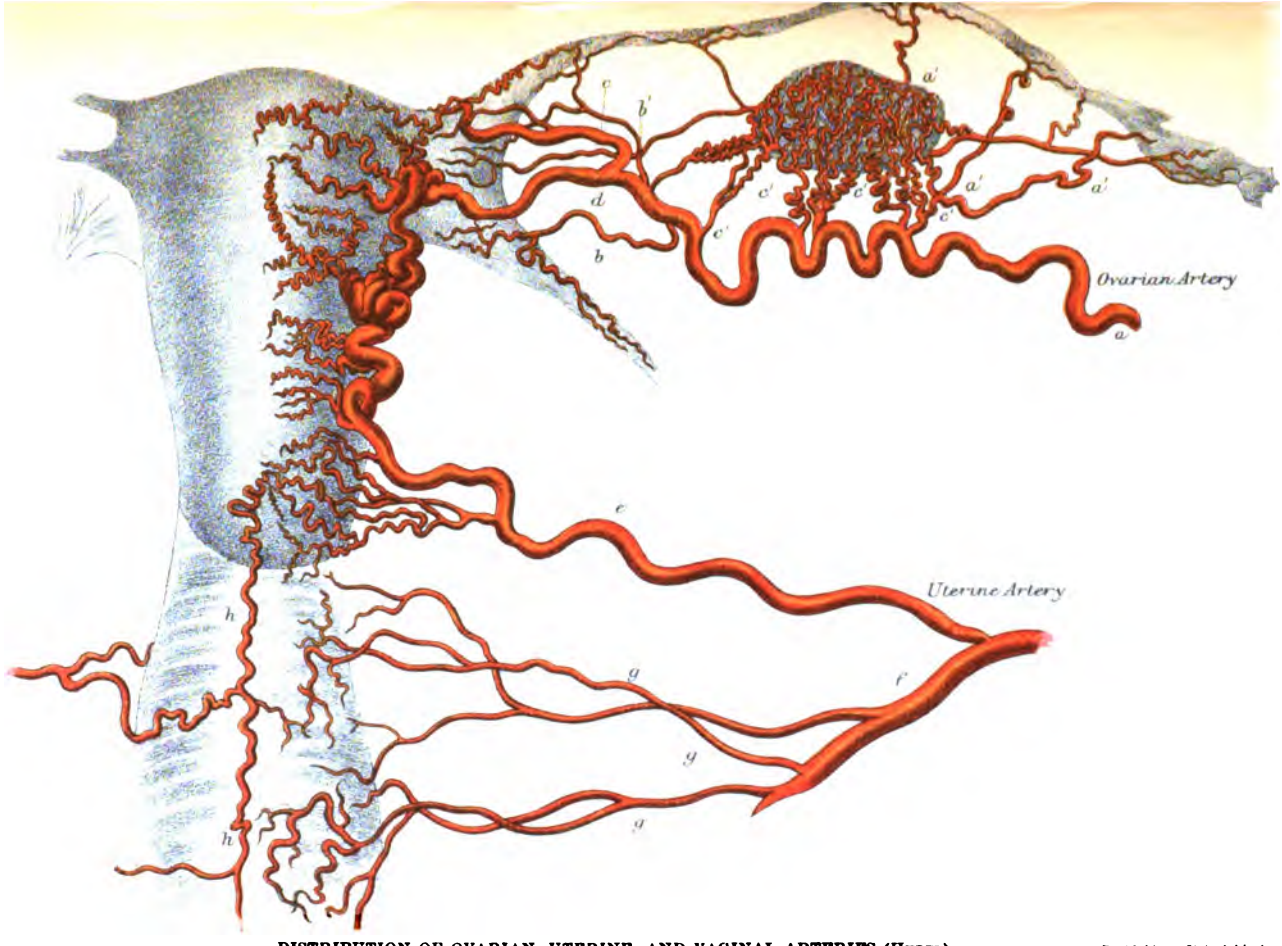
The uterus derives its vascular supply from two sources, the ovarian arteries and the uterine arteries. The ovarian arteries rise from the abdominal aorta; on reaching the pelvis they enter the folds of the broad ligament on each side and run towards the upper angle of the uterus, near which they divide, each into two branches, an upper and a lower. The upper supplies the fundus of the uterus, while the lower joins the uterine artery of the same side. The uterine artery on each side takes its origin in the anterior branch of the internal iliac; it runs inwards and downwards towards the cervix of the uterus; here it takes an upward course between the folds of the broad ligament and outside the uterus, terminating near the upper part of the organ by joining the lower branch of the ovarian artery.

As it approaches the cervix it gives off branches, some of which run downwards towards the vaginal portion, while others run more or less directly across the cervix before and behind, joining similar branches from the artery of the other side; these form arterial circles around the upper part of the cervix. (Plate I.) Above the level of the cervix the uterine arteries and the two branches of the ovarian already named, give off similar

DESCRIPTION OF PLATE I.

Illustrating Dr. John Williams's paper on the Circulation in the Uterus.

Distribution of ovarian and uterine arteries (Hyrtl).



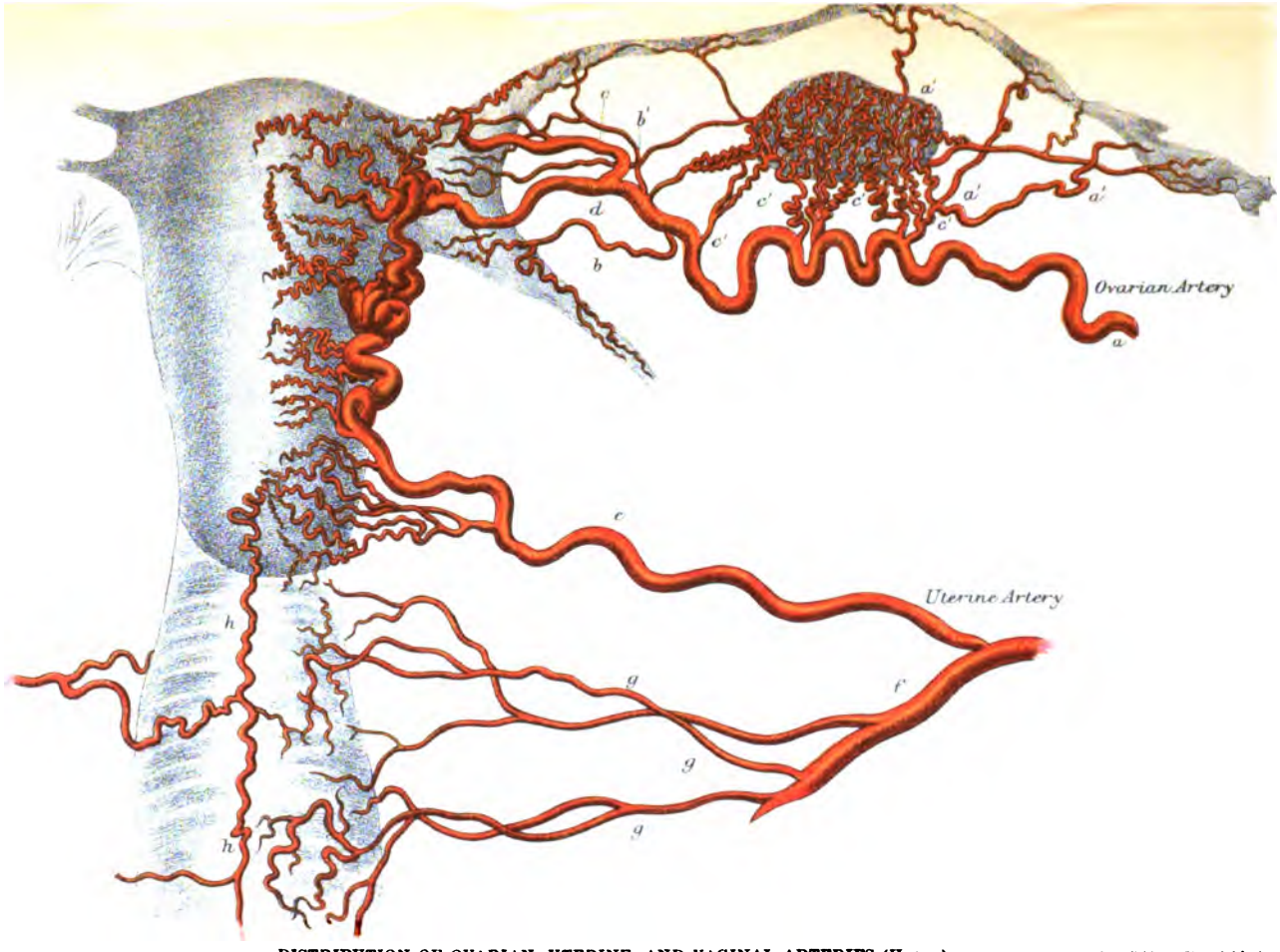
DISTRIBUTION OF OVARIAN, UTERINE, AND VAGINAL ARTERIES (HYRTL).

PLATE I

DESCRIPTION OF PLATE I.

Illustrating Dr. John Williams's paper on the Circulation in the Uterus.

Distribution of ovarian and uterine arteries (Hyrtl).



DISTRIBUTION OF OVARIAN, UTERINE, AND VAGINAL ARTERIES (HYRTL).

PLATE I

DESCRIPTION OF PLATE II.

Illustrating Dr. John Williams's paper on the Circulation in the Uterus.

FIG. 1.—Section (median longitudinal) of the uterus of a fœtus at the sixth month of pregnancy (drawn by Mr. H. R. Spencer, M.B.).

b, *b*, *b'*. Peritoneal and proper muscular coat of the uterus. It is broken off at *b'*.

c, *c*, *c*. Submucous connective-tissue layer, in which the vessels run. The whole thickness between this layer and the inner surface *e*, *e*, is

d, *d*, *d*. The mucous membrane of the uterus; the greater part of its thickness being muscularis mucosæ.

FIGS. 2 and 3.—Arrangement of the blood-vessels in the uterus of the fœtus at term.

2. Longitudinal median section.

3. Transverse section of the body.

a, *a*. Sections of the vessels forming circles in the submucous connective tissue.

b, *b*. Branches given off by *a*, *a*, to supply the mucosa.

Drawn from specimens exhibited.

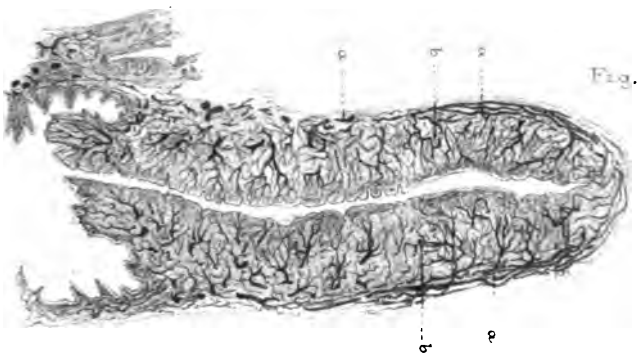
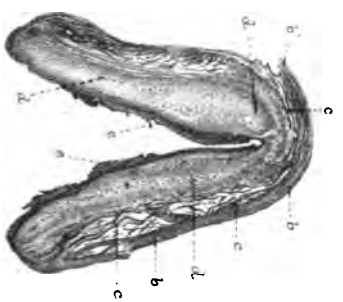


Fig. 2.

R. Boxall del.

Fig. 1.



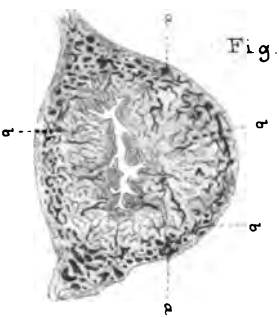


Fig. 3.

R. Spencer del.

West, Newman & C° lith.

DESCRIPTION OF PLATE III.

Illustrating Dr. John Williams's paper on the Circulation in the Uterus.

FIG. 1.—Sagittal mesial section of adult uterus.

a, a. Uterine canal.

b, b. Peritoneal coat.

e, e, e, e. Branches of uterine artery forming circles around uterus by anastomosis, with similar branches from the artery of the opposite side. They run in the submucous connective tissue which lies between the true muscular coat (*f, f, f, f*) and the muscularis mucosæ (*g, g, g, g*).

f, f, f, f. The true muscular coat of the uterus. It lies immediately under the peritoneum, between it and the submucous tissue.

g, g, g, g. The muscularis mucosæ. It lies between the submucous connective tissue and the soft tissue lining the uterine cavity—the decidua—but usually called the mucosa.

h, h. The decidua. Usually called the mucous membrane of the uterus. In the specimen from which these drawings were made it was of extreme thinness. It is sometimes a quarter of an inch or more in thickness. The thickness depends upon the distance in time from a past or a coming menstrual epoch; the nearer a past epoch the thinner is the decidua, the nearer a coming epoch the thicker it is.

FIG. 2.—Transverse section of the body of an injected adult uterus.

a. Uterine canal.

b, b. Peritoneal coat.

c. Broad ligament.

d, d. Uterine arteries lying in the broad ligament, outside the uterus. The section has been made through a bend in the artery.

e, e. Branches of the uterine artery which run in the submucous tissue, forming circles around the uterus. Their sections are oval, because they do not run directly transversely, but with a slight inclination upward. The branches given off by these vascular circles run more or less perpendicularly towards the inner surface.

f, f. The true muscular coat of the uterus.

g, g. The muscularis mucosæ.

h, h. The decidua.

FIG. 3 (Diagram).—Transverse section of uterus, showing the arrangement of uterine arteries, the arterial circles formed by their primary branches, and the branches of the latter supplying the mucous membrane.

I am indebted to Mr. Victor Horsley, M.S., for injecting the uterus from which Figs. 1 and 2 have been drawn.

Fig. 2

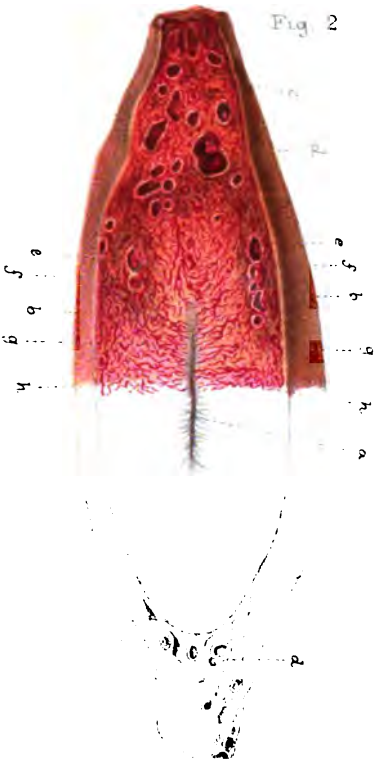
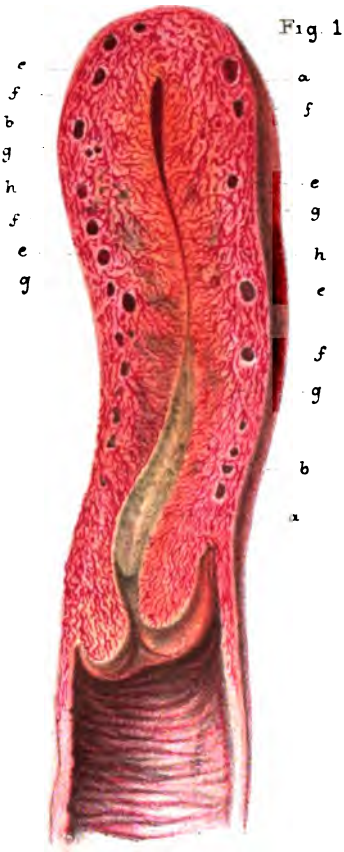
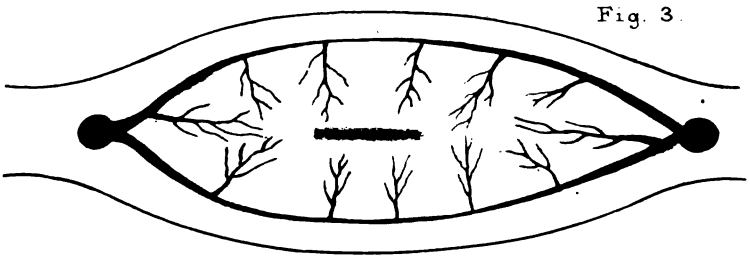


Fig. 1



E. Burgess del.

Fig. 3.



West, Newman & Co chrom. lith.

offshoots, which encircle the body of the uterus with arterial channels as the lower branches do the upper part of the cervix. Their course is not directly across the organ but is inclined slightly upwards (Plate I.) All these primary branches enter the uterus on the side; they do not enter deeply into its tissue, but run a somewhat superficial course, being separated from the peritoneum by only a thin layer of muscular fibres (Plates I and III, figs. 1, 2, 3). They run in a distinct (and regarding the structure of the uterus in its other layers) a considerable layer of connective tissue. This layer of connective tissue is more distinct in the fœtal and infantile than in the fully developed organ (Plate II, fig. 1). The muscular stratum between it and the peritoneum is thin, while that between it and the canal forms the greater part of the thickness of the uterine wall.

From these arterial circles numerous branches are given off, and these branches run towards the mucous surface and in a direction perpendicular to that surface; they anastomose very freely and terminate under the mucous surface in capillary loops, which are often visible in organs which have not been injected (Plates II and III). I have not referred to the sinuosities of these vessels because they have no bearing on the subject in hand.

The venous circulation in the uterus is but slightly different; the veins in the organ follow a course similar to that of the arteries; these convey the blood into the uterine plexus. This plexus is a network of veins lying with the arteries in the layer of connective tissue already mentioned; the veins are without valves and the connective tissue around them is often very distinctly seen even in the adult. The plexus communicates freely with the ovarian vein, the vaginal plexus, and the numerous veins in the broad ligament, so that the provision for gathering the venous blood from the uterus and its return to the heart is extremely abundant. The return, it is said, is effected usually and chiefly through the ovarian veins; but both these veins can be tied with impunity, and in so

far as is known, without materially affecting the return of blood from the uterus; indeed, as the whole of the pelvic venous system can be injected through any one of its larger trunks, this is not surprising. When the ovarian veins are tied there is ample room for the return of the blood from the uterus by the connections of the uterine plexus with the internal iliacs.

We find then that the uterine arteries run between the folds of the broad ligaments outside the uterus; that their primary branches run across the organ, forming circles around it, lying in a layer of connective tissue near the peritoneal surface; that these circles supply all the thickness of the uterine wall lying between them and the uterine canal by means of branches which run in a direction perpendicular to the mucous surface; that the veins are arranged in the uterus like the arteries; that they form a plexus in the connective-tissue layer near the peritoneal surface which communicates freely with the other venous plexuses of the pelvis.

From these facts certain conclusions of more or less value may be drawn.

1. The layer of connective tissue in which the arterial circles run and in which the venous plexus lies, is the submucous tissue of the uterus.

2. The whole thickness of the uterine wall between this layer of connective tissue and the inner surface of the uterus is the mucosa uteri; and the thin layer of soft tissue at the inner surface of the uterus, which periodically increases in thickness, and is shed, is the decidua; and although it has been called the mucous membrane of the uterus, yet it is only a very small portion of that structure.

3. The provision for the flow of blood into and out of the uterus is such that the process can with difficulty be disturbed by mechanical causes. The entrance and the exit take place at the sides of the organ at numerous points, and not at the extremities of it; while in the uterus the direction of the current is transverse to its length and perpendicular to its surfaces; so that a ligature

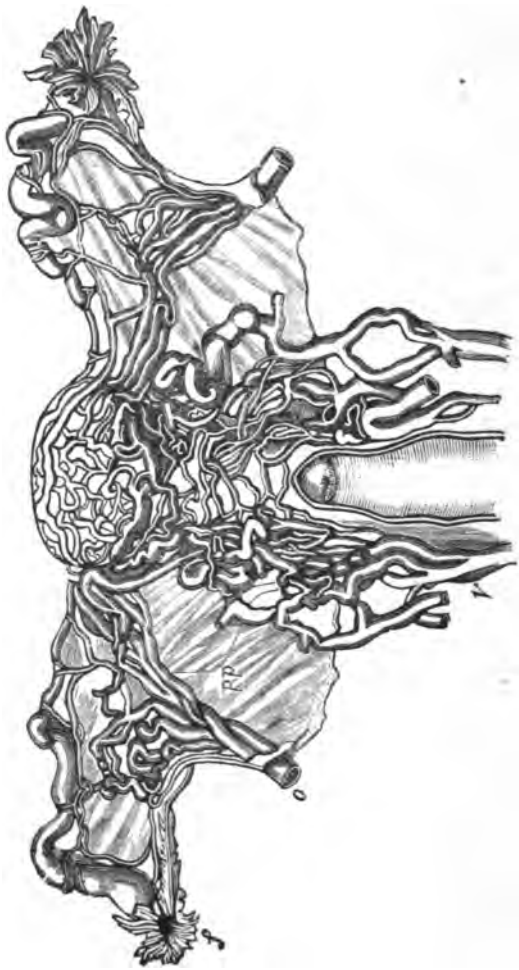
might be placed around the uterus at any point without affecting the circulation above and below.

The only ligature which could materially interfere with the flow of blood into or out of the uterus is one surrounding the broad ligaments (their upper borders being included within it), together with a portion of the uterus. In this case the inflows to, and the outflow from, the parts above or within the ligature would be diminished or stopped. Conditions similar to this are found when the uterus forms a hernia, be it in the inguinal canal or in the canal or pouch of Douglas. When the fundus of the uterus is found in the pouch of Douglas the condition is spoken of as retroflexion or retroversion, but it is really a great deal more, and it would be just as correct to speak of the condition found when the uterus is in the inguinal canal as anteflexion or anteversion. Both are true herniæ and the symptoms are due in great part to the constriction at the neck of the sac—in posterior hernia the sacro-uterine ligaments.

There is another condition which may interfere with the return of blood from the uterus, and that is procidentia. Here all the veins of the broad ligaments may be so stretched that their channels may be considerably diminished, and thus all the channels for the return of blood from the uterus may be narrowed and the organ consequently suffer from passive congestion.

These two herniæ of the uterus and great procidentia appear to be the only displacements of the uterus which can give rise to congestion of the organ.

Further evidence respecting the effects of a ligature placed round the uterus at any point, or of an acute flexion of the organ, upon the venous circulation may be obtained by experiment; that is by injecting its system of veins. If an acute flexion interferes with the return of blood from the organ and causes congestion of its body, it does so by pressure on the veins returning the blood from the body of the uterus, and consequently would occasion some difficulty in the process of injecting the



Uterus and vagina with their venous supply seen from behind (Luschka).

veins of the part. To test this point I have stitched the fundus of the uterus closely to the cervix, thus securing the acutest flexion possible; then injected a coloured fluid into one of the veins of the broad ligament, and immediately the veins on the other side of the uterus became distended with the injecting fluid. On making a section into the walls of the body of the organ, the veins of that structure were also found well injected. It is not meant by this that a perfect microscopical injection of the uterus was thus made; to obtain such is, as is well known, a very difficult task; but the finer branches of the veins throughout the organ were well injected. This appears to show what the arrangement of the blood-vessels has already taught us; that the acutest flexion does not interfere with the flow of blood from the uterus.

Dr. GRAILY HEWITT considered that the Society was under great obligation to Dr. Williams for the valuable addition now made to our knowledge of the circulation in the uterus, although he could not agree with him in regard to the conclusions he proceeded to draw from these observations. He was not at all astonished to find the arrangements as regards the blood-vessels of the uterus adapted in an elaborate degree for preventing interference with the free passage of the blood when the organ was flexed. No doubt bending of the uterus was common and the arrangement described would sufficiently provide against obstruction when the flexion was temporary or slight in degree. But he considered that when severe, and especially when sudden in occurrence, there would be great liability to congestion at the two extremities of the uterus. An illustration of this was afforded by the somewhat analogous event of congestion and swelling following forced and continuous bending of one of the limbs resulting in a certain obstruction to the free circulation. His own experience had taught him that congestion of the uterus co-existing with marked flexion was very decidedly relieved by straightening the uterus, and hence the explanation had suggested itself that the compression at the central part of the uterus was operative in causing the congestion. Another explanation as regards the congestion in retroflexion was given by Dr. Williams, viz. compression and incarceration of the fundus by the utero-sacral ligaments. He considered this occurrence very rare, although he had carefully looked for it: certainly such incarceration was absent in the large majority of retroflexion with congestion. But this explanation, admitting its force for retro-

flexions, had no bearing on the congestion liable to occur in anteflexions. He had seen several cases of very severe congestion with anteflexion and there were no ligaments capable of incarcerating the uterus in front of it. The extremely rare case of anteflexion with hernia in the inguinal canal had no bearing on the question. Another consideration was of great importance. He had observed very frequently congestion and swelling of one lip of the cervix uteri alone and had noticed that this swelling was almost invariably on the anterior lip in anteflexion and on the posterior lip in retroflexion. In fact in many cases the diagnosis could thus be predicted. This was confirmatory evidence of the effect of the flexion in producing the congestion which could not be disregarded.

Dr. HERMAN said that the clinical bearings of Dr. Williams's paper were very important. Dr. Williams's deductions from his anatomical researches were confirmed by the great frequency with which flexion of the uterus was met with without symptoms. That flexion of the uterus was often combined with congestion was sufficiently explained by the great frequency of flexion, and if it were not often found along with congestion, that would be a good reason for thinking that flexion prevented congestion. The occurrence of congestion, both with anteflexion and with retroflexion, was thus accounted for by coincidence. But there were cases of suddenly produced backward displacement of the uterus, attended with acute symptoms, quickly relieved by replacement of the organ, to which no analogous cases of anteflexion were seen. There were also cases of retroversion of the uterus, without flexion, with congestion, which were relieved by elevation of the uterus to the axis of the pelvic brim. These cases were not explained by the theory of flexion, while the effect of the utero-sacral ligaments which Dr. Williams had pointed out, did explain them. Cases of congestion of the uterus by pressure of the veins of the broad ligament against the utero-sacral ligaments were not common, and cases of incarceration of the uterine body in Douglas's pouch were quite exceptional; this was because the shape and position of the utero-sacral ligaments varied so much in different cases, it being only seldom that they were tense enough, and close enough together, to be capable of incarcerating the body of the uterus. When they had this exceptional development, they were generally higher up than usual, and this might explain why observers had not been always able to feel with the finger.

Dr. GALABIN thought that the author had successfully shown that the arrangement of the vessels was such as to diminish as much as possible the chance of any congestion being produced by flexions of the uterus. He was not, however, convinced that the action of the utero-sacral ligaments was in general so important in retroflexions as the author contended. He had examined

them in all cases of retroflexion since Dr. Williams's view was first stated, and had only exceptionally found them appear to constrict the fundus. If there were such constrictions the resistance of the fundus to reposition ought suddenly to cease when it was pushed past the constriction, and he had only rarely found this to be the case. In retroflexion most observers would agree that there was often evidence of congestion in the fact that the menstruation was excessive, and that this symptom was relieved by the use of a pessary. He thought that in most cases the utero-sacral ligaments had only a minor effect upon the uterus resting against them, and that the stretching and twisting of the broad ligaments, and possibly even the flexion itself, ought also to be taken into account. The transverse arrangement of the vessels might be expected to prevent congestion above the level of the bend being produced by flexion, but not congestion of the interior at the part involved in the bend. Moreover, in the section of the fœtal uterus shown by Dr. Williams, there appeared to him to be longitudinal vessels as well as transverse. The facility with which a slight displacement of tissue interfered with venous circulation was easily seen by the change of colour which often took place when the cervix was extruded externally in procidentia, even though there was no apparent constriction at the vulva around its neck. He did not agree with Dr. Herman that the frequent occurrence of anteflexion without signs of congestion proved that flexion could never have anything to do with congestion. In anteflexion the uterus had in most cases grown in the shape in which it was found. But if flexion ever produced congestion, this could only be expected when the flexion was acquired, and even then the vessels would probably accommodate themselves to the changed state after a time.

Dr. Aust Lawrence (Clifton) considered that very few cases of displacement of the uterus could be used either for or against Dr. John Williams's assertion "that flexions of the uterus *per se* did not produce congestion of that organ owing to the arrangement of the blood-vessels," as cases of simple retro- or ante-flexion were exceedingly rare; he could only call to mind three cases of pure and simple retroflexion of the uterus uncomplicated with any other condition of that organ, and all these three cases went to prove that the displacement by itself was sufficient to cause increase of hæmorrhage at the catamenial period, the inference from this increase being that there existed a congested condition of the uterus. The first case was a girl, aged twenty-two, unmarried, who was thrown from a cart; from having had no uterine trouble, her very next period was excessive; she was then seen by Dr. Aust Lawrence, and he found acute retroflexion of the uterus. With some difficulty, owing to the uterus being held tight between the utero-sacral ligaments, it was replaced. The hæmorrhage entirely ceased upon replacement and

the next period was normal, evidently the congestion being relieved by the return of the uterus to its normal position. The other two cases were in their history precisely similar; in neither of them was there any abnormal discharge at the catamenial periods until, having had falls, one from a carriage and the other downstairs, a retroflexion of the uterus was produced and the following periods were excessive until the organ was replaced and then they became normal.

Dr. CHAMPNEYS pointed out that the arrangement of vessels in the uterus was very similar to that in the intestines, which the uteri of many of the lower animals greatly resembled. The intestines were marked by acute flexions every few inches, but no harm to the circulation resulted from them. In fact, the vascular arrangements in both cases were directed to maintaining an equable supply of blood under flexion, and in one case they were certainly always competent to provide for such a condition. He thought congestion was often diagnosed on insufficient grounds, indeed, he believed congestion of the fundus was generally impossible of verification. He believed that the influence of the utero-sacral ligaments was not commonly exercised; this belief was the result of careful examinations. In cases of retroflexion with profuse menstruation there was the influence of descent of the fundus, and it had repeatedly happened to him to lift up the fundus with a pessary to find the symptoms relieved and the uterus high up, indeed, but as much flexed as ever.

Dr. MURRAY saw the correctness of Dr. Williams's views and explanation; for although there were cases of congestion with flexion, there were also many flexions without congestion. So also, an excess of menstruation, amounting to menorrhagia, did take place without flexion. The prolapse of the uterus would clearly tend to produce congestion by the upper and lower circulation of the uterus being both mechanically interfered with.

Dr. WILLIAM DUNCAN thought that congestion of a retroflexed uterus was not unfrequently due to the flexed fundus being caught between the utero-sacral ligaments, especially where these had been thickened and shortened from a previous cellulitis; he had seen such cases. He did not think that the thickening of the posterior cervical lip in cases of retroflexion proved that the circulation in the uterus was impeded, for the condition was sometimes found where the uterus was perfectly normal in position. He found that many cases of congestion occurring in flexed uteri could be cured without the use of any mechanical support whatever.

In reply, Dr. WILLIAMS thanked the Society for the criticism bestowed on his paper; at the same time he expressed his regret that one part of the paper—and that an important one physiologically, pathologically, and clinically—had not been discussed. This part was that which referred to the

division of the wall of the uterus into four layers—a peritoneal, a proper muscular, a submucous, and a mucous. The muscular coat proper consisted of a thin layer placed immediately under the peritoneum, and was composed of longitudinal and circular muscular-fibre cells. Next to this came the submucous layer of connective tissue in which the circles of vessels lay; and then the thick layer inside the latter which was the mucous membrane. In the human uterus the mucous membrane was very thick, and was composed of a thin soft superficial layer (the decidua) and a thick layer of muscular-fibre cells (the muscularis mucosæ). The soft superficial layer or decidua had been generally regarded as the mucous membrane of the uterus, and it had been generally believed that the mucous membrane was directly attached to the muscularis without the intervention of a submucous layer of connective tissue. This was not the case, however. It was true that the decidua was imposed directly upon the muscularis and that glands passed into the muscularis, but the decidua was only a thin layer of the mucosa, for the mucosa consisted of the decidua and a considerable thickness of muscular tissue. It was under this layer of muscular tissue that the submucous connective tissue was to be sought and was found. It was seen very distinctly in the fœtal uterus and under certain conditions in the adult uterus, as specimens on the table showed, and also in the uteri of some animals. Dr. Hewitt characterised the argument adduced in the paper as an *a priori* argument. Dr. Williams did not think any the worse of it, or that it was less true, for this reason. Indeed the arrangement of the blood-vessels was such that congestion of the body or of the cervix as a result of a constriction of the uterus above the insertion of the vagina was palpably impossible. The illustration given by Dr. Hewitt of congestion occurring in a flexed limb presented no analogy to conditions present in a flexed uterus; a flexed finger would have been nearer the mark; and a permanent flexion of the finger gave rise to no congestion of it. The congestion of a flexed limb when present resulted not from the flexion, but from the dependent position of the part congested. The arrangement of the blood-vessels in a finger and in a limb were so different from that in the uterus that no argument based upon the results of flexion in these parts was applicable to the results of flexion of the uterus. Dr. Hewitt thought that temporary flexion would not produce material disorder of the circulation, but that a permanent one would. Dr. Galabin, on the other hand, believed that a sudden flexion would produce congestion, but that after a time collateral circulation would be established, and the congestion would disappear—so that a recent flexion would give rise to congestion, while an old-established one would not. These two views appeared to be contradictory, and were certainly opposed to what might be expected from the arrangement of the vessels in

the uterus. Dr. Hewitt based his conclusions upon clinical observation. There was no doubt that congestion, or enlargement or engorgement of the uterus and flexion of the organ were frequently met with together, but it did not follow that the congestion resulted from the flexion. For clinical observations to be of any value in settling the question under discussion a very careful selection of cases should be made. Certain cases should be excluded as being inapplicable. Congestion might be present without flexion, and, as is well known, it was often present as the result of pregnancy and labour. The only cases which could be of service in solving the question were those in which the uterus was presumably healthy previous to the occurrence of flexion; so that all cases of women who have been pregnant or who have had attacks of inflammation in the neighbourhood or around the uterus should be excluded from, and only those who have never been pregnant should be taken into, the reckoning. Dr. Williams did not know whether Dr. Hewitt used the latter kind of cases only or all cases of flexion indiscriminately in drawing his inferences; taking the latter class of cases only into account, Dr. Williams had never found congestion or enlargement follow flexion. Dr. Aust Lawrence's first case was important and bore out the views stated in the paper. A young, healthy woman suffers from sudden hæmorrhage from the uterus, the result of an accident. On examination hernia of the uterus into the Douglas pouch is found; the hernia is reduced and the hæmorrhage ceases. His other cases were given in insufficient detail to bring them to bear on the question. The immediate results of replacing the uterus in a few cases, however, formed a very unsafe foundation upon which to base an argument; in some cases arrest of hæmorrhage appeared to be the result, in others again the bringing on of menstruation, as in Dr. Murray's cases; indeed, Dr. Robert Lee pointed out long ago that a mere vaginal examination brought on hæmorrhage in some cases in which the uterus was apparently healthy. The swelling of the lip corresponding to the angle of flexion on which Dr. Hewitt laid stress and which was met with in some, but by no means in all cases of flexion, was explicable by the arrangement of the vessels in the cervix. Below the insertion of the vagina the vessels ran longitudinally in the lips of the uterus, and not transversely, as specimens on the table showed.

NOTE ON A CASE OF ABSENCE OF THE UTERUS AND OCCLUSION OF THE VAGINA.

By Dr. F. Bousquet (Marseilles).

(Communicated by Dr. GERVIS.)
(Translated by Dr. HERMAN.)

The age at which the menses appear in the young girl is extremely variable.

Menstruation may be very precocious, or not appear till several years after the age of puberty. Numerous cases of precocious menstruation have been reported.

Sir Astley Cooper relates the history of a child who first menstruated at the age of three years; Lebeau mentions a similar case. Robertson speaks of a workgirl who was delivered at the age of twelve years and some months. Smith, of Coventry, and Wilson have observed analogous facts.

By the side of these scientific curiosities we ought to take great account of the influence exerted by climate; thus the observations of Brierre de Boismont and other authors seem to prove that menstruation begins earlier in hot countries than in cold. At Siam, according to Campbell, girls in general reach puberty at twelve years of age.

Dr. McDiarmid has observed, on the contrary, that among the Esquimaux menstruation only appears towards the age of twenty-three, and the flow is small in quantity and comes on only in summer.

In our temperate climate the menses appear between thirteen and fourteen, but it is, however, not rare to see this physiological function not established until sixteen or seventeen.

Certain pathological conditions, such as tuberculosis and

anæmia, may thus be a cause of delay in the establishment of the menstrual function. But whenever a girl who is robust, vigorous, and of good constitution passes her twentieth year without the menses having appeared, especially when signs of general congestion are periodically observed, accompanied with painful sensations in the pelvis, we shall be right in suspecting some physical cause preventing the menstrual flow. In such a case we ought not to hesitate in asking permission to make a local examination.

Some months ago I met with a case of this kind, and as these cases are extremely rare and of very great interest, I have thought it my duty to relate it in detail.

Last September I was called into a neighbouring department to see a girl, aged twenty, whose condition was the cause of legitimate anxiety to her family.

The menses had never appeared, but for about six months hæmorrhages had appeared at the usual intervals, sometimes from the rectum, and sometimes from the gums, lasting generally four or five days.

As an advantageous marriage was projected, the family, in obedience to honourable scruples, thought it their duty to seek out and clear up the cause of a condition which appeared to them so abnormal.

I found myself in the presence of a girl aged twenty years and some months, of stature above the average, of robust appearance and of sanguine temperament.

The hæmorrhage from the gums was at this time at its second day; it was abundant enough to cause almost continual spitting of saliva with a considerable mixture of blood; the gums were swollen, painful, and bleeding when touched with the finger. There was giddiness, a sense of oppression, pain in the region of the kidneys, a feeling of weight in the pelvis; no discharge of any kind by the genital passage, never leucorrhœa.

I pointed out to the family the necessity for a local examination, which was acceded to, and postponed till the next day.

On separating the labia majora my first impression was that the hymen was quite imperforate. This membrane was very hard, resistant, and of almost fibrous consistence; on very careful examination a minute opening could be perceived in its centre, from which flowed a whitish mucus; the point of a probe could be inserted in it. There was then behind the hymen a vaginal cavity, which consequently was closed, and it was natural to suppose that this was the obstacle to the menstrual flow. An operation was then decided upon to remedy this troublesome condition.

The next day, after having introduced into the opening in the hymen a fine grooved probe, I carefully incised the upper half of this membrane; then I introduced the finger to satisfy myself of the existence and the condition of the vaginal canal. But what was my astonishment not to be able to penetrate further than about two centimetres! In fact, at this distance there was a second white membrane, of nacreous appearance; it was resistant to pressure, but gave to percussion, whether practised with the finger or with the sound, a tympanitic note, manifestly due to the presence behind it of a new cavity.

Removing the small speculum which I had introduced for the purpose of this examination, I now incised the second diaphragm through its whole extent, but no blood escaped. This membrane was in fact fibrous, hard, and creaking under the bistoury. I could thus discover a new portion of the vagina about three centimetres in length. Having introduced the finger through this new opening, it entered a sort of cul-de-sac, smooth everywhere, at the bottom of which I could not feel the cervix uteri.

The sufferings caused to the patient both by this examination and by the different manœuvres to which she had just submitted, were acute. I therefore thought it my duty to stop, contenting myself with placing between the two incised membranes a little carbolized charpie.

I had then, in short, created a vagina by incising a hymen of abnormal consistence and dimensions, and a

second membrane harder and more fibrous than the first.

But the result of the operation was incomplete, for I had only been able to give to the vagina a length of about five centimetres, instead of the ordinary length, which is from eleven to thirteen, and I had not yet ascertained the presence of a uterus.

The vulvar wound cicatrised rapidly, and at the end of some days I proceeded to a new examination, but this time I could not yet feel the neck of the uterus.

I then advised that the time of menstruation should be awaited, and the administration some days before their appearance of capsules of apiol, in order to facilitate the flow.

In spite of these precautions the menstrual hæmorrhage took place again by the gums; so then I decided to proceed to a more complete examination, in order to be able to pronounce on the presence or absence of a uterus. I consequently requested my teacher and friend, Professor Pirondi, to be good enough to give me the help of his experience.

The speculum was anew introduced, the fundus of the vagina examined and explored in every direction, but it presented not the least opening, not the smallest foramen; it was a cul-de-sac with firm and almost rigid walls.

Then combining vaginal and rectal touch, I felt distinctly my fingers meet with the recto-vaginal septum between them, and as high as I could feel by the rectal touch I could perceive no uterine organ, not even an atrophied or rudimentary one. Then introducing a finger into the rectum and a sound into the bladder, I arrived at the same result. Professor Pirondi having made the same investigations, arrived at the same conclusions, so that there was no longer any doubt as to the diagnosis that the uterus did not exist.

This young girl was thus the subject of a triple vice of conformation; obliteration of the vulva, closure of the vagina, and absence of the uterus.

This fact appeared to me extremely curious as well as very rare; the numerous researches that I have made to find an analogous case have been fruitless. One case, however, can be compared to it by reason of the resemblance of some of the symptoms observed. It is the one which was studied in 1872 at St. George's Hospital, in the practice of Dr. John Clarke, and of which the history is complete and interesting. It is reported in the 'Lancet,' August 17th, 1872, p. 225.

These two observations clearly show the influence of ovulation on the entire organism; they prove the intensity of the effort that nature makes to find an outlet for blood.

They seem to establish that vascular tension becomes general when the passage by way of the uterus is not free.

The first observation, which is the subject of this note, has not, like that of Dr. John Clarke, the authentication of an autopsy; but the similarity of the symptoms, as well as the results of most careful local examination, are enough to permit the diagnosis of complete absence of the uterus to be regarded as absolutely certain.

Dr. WILLIAMS did not think the data given by the author justified his conclusions as to the hæmorrhage being "vicarious menstruation." Dr. John Clarke's case was well known, and had been quoted as a typical example of vicarious menstruation. The case had, however, been under Dr. Clarke's care only for a few days; and the history given is the woman's own tale and not the result of Dr. Clarke's observation, and it was well known that such tales of periodical bleedings were not be depended upon. Dr. Williams had seen several cases of women suffering from amenorrhœa who stated that they bled periodically from the nose and elsewhere, or had fits at monthly intervals. He had taken four or five such cases into hospital and watched them for a month or six weeks, and found either no bleeding or fits or bleeding and fits at irregular intervals only. Dr. Clarke's case seemed to be purpura in a woman without a uterus.

Dr. ROUTH said,—Many years ago I attended a case of absence of uterus. The patient was an unusually well-made young lady, married, full-breasted, and with well-formed pudenda; clitoris,

external and internal labia well developed. She also confessed to sexual feelings, but had come to consult me, as the passage was stated by her husband to be too short. There were no catamenia. On examination I found a vagina full-sized inferiorly, terminating in a pointed cul-de-sac. It was about three and a half inches long. I could not feel either per vaginam or per rectum (when I introduced two fingers), anything like a uterus. However, in consultation with Dr. W. R. Rogers (my colleague at the Samaritan Hospital), he put her under chloroform, and he was enabled to pass his entire hand up the rectum and so to prove beyond a doubt that the uterus existed. Dr. Routh believed this hand introduction was really the only certain way of making the diagnosis. Here the small hand of a lady doctor might prove an advantage. His own hand and that of many practitioners was too large. Dr. Routh satisfied himself by means of a wedged-shaped plug with lengthening the cavity, by half an inch to one inch more, and she left apparently contented. He saw her two years after; things were in statu quo and her health excellent. The hand enabled one to prove beyond all doubt that a uterus much higher up, connected perhaps to the top of the vagina by a band or cord, did not exist. He agreed with the gentleman who had spoken before as to the non-necessity of a vicarious menstruation in these cases; such was rather due to coexistent purpura than to a substituted secretion.

Dr. Champneys said that women were apt to attribute any unusual hæmorrhages, whether with amenorrhœa or not, to some menstrual influence. It was his habit to make such patients keep a diary of their hæmorrhages and monthly periods. Such an exercise was often sufficient to effect a cure, and in his experience it had invariably sufficed to explode the theory of vicarious menstruation. He agreed with the former speakers as to the nature of the present case.

Dr. Amand Routh related the case of three sisters who had never menstruated, their ages being respectively 25, 22, 20. The two younger were examined, and the vagina was found to be only two inches long, ending in a cul-de-sac. In one case, recto-abdominal examination proved the absence of uterus and ovaries; in the other the uterus was represented by a nodule the size of a filbert, corresponding in position to a dimple in the vaginal cul-de-sac. The eldest daughter had been married two years, but as her marital relations were satisfactory she declined to be examined. All these cases were extremely anæmic and had been said to be consumptive. There had been no vicarious menstruation. The mammary glands and pudenda were child-like. A younger sister, aged 17, was quite healthy, menstruating regularly.

Mr. Walter Griffith mentioned that there was a specimen illustrating these conditions in the museum of St. Bartholomew's

Hospital, in which the ovaries lay on the surface of the pelvic peritoneum and there was neither uterus nor vagina. The pelvis, as was said to be usually the case, had some of the characters of the male type. Also that Dr. Matthews Duncan had had a similar case lately, the vagina not measuring more than one inch in length.

MAY 6TH, 1885.

J. B. POTTER, M.D., President, in the Chair.

Present—31 Fellows and 3 visitors.

Books were presented by Dr. Alloway, Dr. Malochia De Cristoforis, the British Gynæcological Society, the Secretary of the Australasian Sanitary Conference, and the Society for the Advancement of Medical Science in Japan.

The following gentlemen were elected Fellows of the Society:—John Frederick Briscoe, M.R.C.S.; Sydney Robert Lidiard, L.R.C.P. Ed. (Hull); Charles Booth Meller, L.R.C.P. Ed. (Newport, Isle of Wight); Charles Stormont Murray, L.R.C.S. and L.M. Ed., and Emil Arnold Praeger, L.F.P.S.G. (Victoria, Canada West).

MALFORMED FŒTUS.

DR. HORROCKS exhibited a malformed fœtus, of the dissection of which the following is an account:

Left upper extremity.—The hand and forearm are apparently quite absent, the arm ending in what seems to be the lower end of the humerus. The skin over the stump has no mark like a cicatrix on it, nor can any cicatricial tissue be detected by cutting through it.

The humerus is greatly swollen at its upper part and

ends below in a somewhat contracted extremity upon which the condyles are not to be made out. Attached to this extremity by means of ligaments is a small bone about an inch long, and tapering to a point like the fang of a tooth. This bone is flexed on to the outer surface of the humerus, so that before dissection its presence was not noted.

All the muscles that normally take origin from the condyles of the humerus are absent. There is no vestige either of the supinator longus or extensor carpi radialis longior. The brachialis anticus is rudimentary. The biceps ends in a tendon which is fixed to the lower end of the humerus and not to the small bone above described. The triceps ends in a tendon which is partly attached to the end of the humerus, partly to the small bone before mentioned, and partly to fascia. The coraco-brachialis is absent. The muscles about the shoulder are normal.

The axillary artery ends in branches which supply the muscles of the arm and the integuments. There is no proper brachial artery.

The nerves are very small. A small musculo-cutaneous supplies the biceps and gives cutaneous filaments. The musculo-spiral supplies the triceps and also gives cutaneous filaments. The median and ulnar nerves are represented by two tiny nerves which run down on the inner side of the biceps and are lost in the fascia near the end of the humerus. The nerve of Wrisberg and the lesser internal cutaneous and the intercosto-humeral were not found.

Right upper extremity.—There are only two digits, namely, the thumb with two phalanges, and what appears to be the little finger with three phalanges. There is only one carpal bone, ? the trapezium, situated between the end of the radius and the first phalanx of the thumb. All the other carpal bones are absent, and the little finger is very loosely connected to the ulna by means of ligamentous tissue, which appears to take the place of the carpal bones. All the metacarpal bones are wanting.

The long flexor of the thumb and the extensors of the phalanges of the thumb are present and inserted normally.

The extensor ossis metacarpi pollicis is present in the forearm but ends in a tendon which is lost in the tissue beyond the end of the radius. The other extensors are also present normally in the forearm, but are lost in this tissue, which occupies the position of carpus and metacarpus. No tendons pass to the digit which represents the little finger. A few muscular fibres only are to be found to represent the small muscles of the thumb and all the interossei and the adductor pollicis; and all the small muscles of the little finger are wanting.

The radial artery runs deeply amongst the flexors and does not wind round to the back of the wrist. It goes along the front of the single carpal bone and bifurcates into two digital branches for the two sides of the thumb. There is no palmar arch, deep or superficial. The ulnar artery is very small and does not reach to the end of the ulna. The little finger appears to get its blood-supply from small filaments of the radial.

The ulnar nerve supplies the flexor carpi ulnaris and one half the flexor profundus digitorum, but does not reach the wrist. The radial nerve supplies the back of the thumb and gives filaments to the back of the representative of the wrist. The median nerve gives a cutaneous filament to the wrist.

Right lower extremity.—This is shorter than the left by the length of the leg. The inner side of the foot and great toe touches the inner condyle of the femur, the sole of the foot being directed towards the left leg. The fibula articulates with the outer side of the femur, and is directed downwards, a little forwards and outwards up to the middle, where it suddenly turns nearly at right angles, inwards, downwards, and forwards. The tibia is absent, its place being occupied by a little fibrous tissue. The patella is present, the quadriceps being attached normally to its upper border; but the ligamentum patellæ is absent, unless one can take the fibrous tissue which binds the lower end of the patella to the under surface of the condyles as its representative.

The sartorius is attached to the inner condyle. The semi-tendinosus and semi-membranosus run under the inner condyle, and then turn upwards to be attached to the fascia over the patella. All the muscles of the leg are present, but those which usually arise from the tibia are crowded into a very narrow space and are much shorter than normal.

The popliteal, anterior and posterior tibial vessels and nerves are short, but divide normally and are distributed normally.

The articular surfaces on the lower end of the femur are quite normal, and are opposed to the articular surface of the patella and to a fascia prolonged from its lower border, which turns upwards at the back to be attached to the back of the condyles. The joint surface of this fascia is covered with synovial membrane.

The left lower extremity is quite normal.

The palate is cleft by a wide fissure starting half an inch behind the anterior margin of the upper jaw and running backwards through the soft palate and uvula, getting wider as it goes. The septum of the nose can be seen through the fissure. The lips are normal.

The heart, lungs, and abdominal viscera are normal.

The uterus and ovaries are normal.

The brain and spinal cord not examined.

Mr. Alban Doran asked if Dr. Horrocks possessed statistical knowledge which could give a fair estimate of the proportion of such cases that survived to adult life. He had described, in the twenty-seventh volume of the 'Transactions of the Pathological Society of London,' a case of arrested development of the bones of both forearms, where the patient was a female pauper, aged fifty-four, free from any other kind of congenital malformation. Cases of this class were very frequent in infants and certainly rare in adults; the deformity was nearly always associated with other defects of development, which proved fatal independently of general causes of infantile mortality, which must not be overlooked.

TWO CASES OF IMPERFORATE RECTUM.

Dr. Horrocks showed two cases of imperforate rectum.

The first case was that of a female child born at full term. The mother was a multipara and her other children were well formed. The child began to vomit meconium, but it was not until two days had elapsed that I was asked to see it. The anus was marked by a depression a quarter of an inch only in depth. The little finger was passed into the vagina, but no bulging like distended bowel could be felt. Guided by the finger in the vagina, a trocar and cannula were passed through the anus backwards and upwards for nearly two inches. This was done twice with no result except a little discharge of blood. The abdomen was greatly distended and tympanitic. I then performed Littré's operation on the left side and had no difficulty whatever in finding the distended sigmoid flexure. Before laying it freely open I stitched it carefully to the sides of the abdominal incision. The meconium escaped in large quantities with a great deal of wind. The child lived two days. Post mortem there was no peritonitis, and the bowel was nicely fixed to the abdominal wall. The rectum passed in its normal course along the concavity of the sacrum, and ended in a cul-de-sac at some distance from the anus.

It seemed to me that by a little more searching one might have pierced it by the trocar and cannula.

I was also struck with the facility with which I could pass a probe through the abdominal wound along the bowel to the bottom of the blind rectum; the end of the probe could then be easily felt per vaginam, so that had the child survived, it would have been possible to open the rectum from the anus, cutting down upon the probe passed as above.

The second case occurred in a male child one week ago. In that case I passed a trocar and cannula, and pierced the distended blind end of the rectum. I could not draw

down the rectum so as to stitch it to the margin of the anus, so I put in a large cannula and tied it with tapes running backwards and forwards to an abdominal belt. The cannula was removed after two days, and the opening contracted up to some extent. It was dilated with a pair of dressing forceps, and is now going on very nicely, though there is some incontinence of fæces. The child is also the subject of hypospadias.

Dr. ROUTH said that in all these cases, after Littré's operation had been had recourse to, it was incumbent on the operator (so soon as the meconium had been allowed to flow out through the artificial anus) to pass a catheter, or better still, a bougie, to see how far it passed downwards in the direction towards which a natural anus should exist. In the case of a female the investigation was easy, because, if the little finger were placed in the vagina, the end of the bougie could generally be felt through the vaginal walls. Indeed, if there was an anus and a portion of rectum beyond it, the end of the bougie could even be felt by the finger passed upwards into the rectal pouch from below. In this way a guide was given for subsequent operations, and a perfect diagnosis made. Unfortunately, however, such operations in young children were mostly fatal. In the case of a male child without anus or rectal pouch the difficulties were much greater, and great credit was therefore due to Dr. Horrocks for his success in the second case mentioned. Supposing, however, the distance between the end of the gut above and the anus below was found considerable, then he thought operations subsequent to Littré's should be put off till the child was older, say eight or ten years old. In operating, however, on children of eight or ten years old, one circumstance should not be overlooked, namely, the strong tendency of plugs applied to be drawn upwards, owing no doubt to the suction upwards during expiration. In one case of about twelve he had seen operated upon by another surgeon he had learnt that several plugs had been so sucked up, and, in addition, an ivory tube with disk below it had been taken up beyond the artificial anus, fortunately with no apparent injury to the child. When subsequently the operation was performed to restore the anus in its natural position, which was found practicable from the proximity of the pouch above with the rectal pouch below, and which so far was quite satisfactorily done, the plugs applied at the new anus made, equally disappeared from this suction, and the case was subsequently sent home by the operator. In such cases Dr. Routh thought these inconveniences might be obviated by passing from the artificial anus above to the new anus

below, and successively so at intervals of days, india-rubber tubing, gradually increasing the size, until such time as by adhesions round the tube a sufficiently large rectum would be left to carry out the natural motions, and allow of the artificial anus above being closed.

Dr. MALINS said that he had seen several instances similar to that shown by Dr. Horrocks. His impression was that in the majority of such cases the blind end of the intestine was within a short distance of the anus. He was of opinion that the introduction of a trocar into an unknown space was not without much risk, and that the safest and most scientific proceeding was to dissect carefully in the median line until the bowel was found, when it could be brought down and stitched to the edges of the incision. He found the greatest difficulty was in preventing contraction of the opening subsequently, and in one case he had to dilate every few months with a sponge tent to keep it open. The absence of a sphincter was also a great source of trouble, and one impossible to be remedied.

Mr. W. S. A. GRIFFITH remarked that a very important point in cases where the bowel terminated some distance above the anus was the difficulty of bringing the end of the bowel down and suturing it to the anus; for if this was not done, a cicatricial fistulous tract alone remained, requiring frequent dilatation to maintain a sufficient patency. The best treatment for these cases is Amussat's operation as recommended by Mr. Morrant Baker and successfully practised by him; one child, a girl now about nine years of age, is living a tolerably comfortable life.

DOUBLE PYOSALPINX.

DR. MALINS showed a specimen of double pyosalpinx taken from a woman, æt. 44, who had died of peritonitis from rupture of a stomach ulcer. The tubes were both bent back and intimately adherent to the respective ovaries by their fimbriated ends, much dilated, and filled with pus. There was also a fibroid growth on the posterior wall of the uterus. The chief peculiarity to which he desired to call attention from the history of the patient was the fact of a marked condition of pelvic disease existing without any special symptoms being present, or the patient's usual duties of life being interfered with.

Dr. HORROCKS said he was much interested in this case, because ever since Mr. Lawson Tait had read his paper at this Society, now eighteen months ago, he had been on the look-out for any fatal case of pyosalpinx. When he (Dr. Horrocks) asked Mr. Tait why he did not see these cases in the post-mortem rooms of the large hospitals the reply was given that they died too quickly to get into hospitals. Dr. Goodhart and the late Dr. Mahomed up to his death, and Dr. Carrington since Dr. Mahomed's death, had kindly promised to carefully examine every case of death from acute peritonitis, to see if this could have been caused by a pyosalpinx. Hitherto that search had been in vain. Two cases of a probably past and cured pyosalpinx had occurred in patients who had died from a totally different disease and in whom there was no recent acute peritonitis and no other form of peritonitis except some old adhesions round the swollen Fallopian tubes. It was very instructive that this case shown by Dr. Malins had actually died from acute peritonitis, and yet that had been due to a cause totally unconnected with the pyosalpinx. Dr. Kingston Fowler had published some cases of pyosalpinx met with in the post-mortem room of the Middlesex Hospital, but in these cases some, if not all, had died from diseases other than the pyosalpinx. Dr. Horrocks contended that these cases did not usually prove fatal, and that therefore the operation of removal of the tubes as recommended by Mr. Tait was in the majority of cases unjustifiable. In two cases operated on, one in America and one in England, both patients had died from the effects of the operation.

Mr. ALBAN DORAN understood that there were no special symptoms in Dr. Malins's case, but he would have liked to have heard if any cause for the disease of the tubes had been discovered. Dr. Horrocks had not referred to Dr. Kingston Fowler's researches which proved the frequency of hydrosalpinx and pyosalpinx. It behoved the Society to meet the subject in its usual scientific spirit, for whilst pathology had proved the frequency of tubal disease there was a tendency amongst many contemporary authorities to diagnose every pelvic disease as some form of salpingitis. There had been an ulceration epoch, followed by eras of flexions, or perimetritis; periods when it had been the fashion to overrate the frequency of diseases that at the same time undoubtedly existed. We were now in an era of salpingitis. Mr. Doran believed that salpingitis was a frequent pathological condition representing inflammation of the female genital tract, extended to its furthest limits from without inwards, and originating as a rule in complications associated with abortion, parturition at term, gonorrhœa, and perhaps leucorrhœa.

ON THE ULCERATION OF LUPUS OF THE FEMALE GENERATIVE ORGANS, INCLUDING PERFORATIONS, PITS, AND EXCAVATIONS.

By J. Matthews Duncan, M.D.

This disease gets its name from the destruction which it causes by ulceration; and although many cases are characterised more by hypertrophy or growth than by destruction, the quality of "exedens" is very common and strikingly peculiar, as well as most injurious and intractable. In my description of the ulcerations of lupus of the female generative organs I shall depend almost exclusively on my own observations.

Ulceration does not form an essential character or part of the disease. I was consulted some years ago in a case of characteristic lupous vaginitis with superficial inflammation of the cervix uteri but no ulceration. The disease was cured and returned, and was again cured in the genital organs without any ulceration appearing. That the disease was lupus could not be doubted, for it was diagnosed by its own characters, and there was additional evidence of its nature in the similar affection of the nose, with partial destruction of the palate. A similar case I have seen repeatedly in a young lady who had hypertrophic lupus of the nose without ulceration. It should be added however, that though in these cases there was no ulceration at the time, yet in the subsequent history it may have made its appearance.

Some ulcerations found in cases of lupus are not to be regarded as strictly speaking forming part of the disease, but are truly described as excoriations resulting from pressure and friction of adjacent surfaces bathed with discharge. The adjacent surfaces may be of mucous membrane or of skin, but every surface so situated does not become ulcerated. Such ulcerations, when examined, are found to be mere extensive rawness, with ill-defined,

irregular edges, and no evidence of further destruction than of the epithelial surface.

In most cases ulceration and hypertrophy are combined, the ulceration attacking, and it may be destroying, one part, while the hypertrophy affects another part. A hypertrophied part is frequently also ulcerated. I have never observed the destruction by ulceration of a greatly hypertrophied part, yet my knowledge of the disease does not make me assured that such an event may not take place. At the same time it is very sure that hypertrophied parts are very little liable to destructive ulceration; and it is easy to imagine an explanation of this consistent with identity of the disease in the exedent ulcer and the enormous hypertrophy.

The pudendum is the part attacked in the very great majority of cases—the labia, the clitoris, the hymen, the vestibule—rarely the mons veneris. The vagina and portio vaginalis of the cervix are not rarely the seat of ulceration;* and cases of destructive ulceration were fully described by Dr. John Williams to this Society last summer.† In the 'Transactions' of this Society for 1879‡ I have given an account of a case of this destructive ulceration within the body of the uterus. I know of no case where it has attacked the tubes, but no doubt examples will be found. In the case referred to, the ulceration perforated the peritoneum.

Ulceration may attack the hips, the groins, and, more frequently than those parts, the insides of the thighs. In all these parts there may be evident continuity of the disease with disease of the pudendum, or it may not be traceable, the ulcer being in the neighbourhood of the pudendum, but separated from it by apparently healthy skin and apparently healthy subcutaneous cellular tissue.

Ulceration attacks the perineum and most frequently the neighbourhood of the anus, being then generally

* See 'Edinburgh Medical Journal,' July, 1884. Case 2.

† Meeting of March 5th, 1884, see 'Lancet,' April 5th, 1884.

‡ Vol. xxi, p. 54.

accompanied by hæmorrhoid-like hypertrophy. I have not seen ulceration of the rectum except destructive ulceration; but that ulceration neither perforating nor otherwise destructive occurs I do not doubt.

Ulceration of the orifice of the urethra, in patches or fissures, or affecting caruncular hypertrophies, is not uncommon. I have not seen ulceration of the course of the urethra or of the bladder except destructive ulceration.

The ulcer is generally healthy looking, of a reddish colour, often very pale in tint, and having defined edges which are sometimes thick like those of a callous ulcer, or overhanging. If the ulcer is deep it may contain yellow, almost slough-like matter attached to its bottom. Generally it is clear and smooth, sometimes rough and granulated. The base of the ulcer is generally somewhat indurated, sometimes thick, and it may be of cartilaginous hardness; sometimes it gives a feeling as if it were formed by a layer of thick crackling rice-paper.

The discharge is purulent, the pus being sometimes laudable, not rarely thin and watery, rarely tinted with blood. The ulcer does not bleed readily when touched, but occasionally it bleeds spontaneously and sometimes very copiously. I have described* a case where the hæmorrhage was a flooding and very alarming, and other cases where it was slighter and long continued.

The ulcer is generally neither tender nor sensitive. A woman with a large ulcer of the vaginal orifice may be cohabiting with her husband and bearing children, without suspicion of being diseased.† Sometimes the ulcer is extremely sensitive and tender, and this without any other peculiarity which might account for the quality. Such sensitive ulcers are sometimes small and near the urethra or the vaginal orifice. Tenderness appears to be sometimes explained by inflammation of the ulcer, which is then bright red, and when this is the case, in pudendal ulcers, the inguinal glands sympathize.

* 'Edinburgh Medical Journal,' July, 1884.

† See case in 'Edinburgh Medical Journal,' December, 1862.

There may be one or many ulcers on the same or on different parts. Sometimes there is an appearance of many ulcers when in reality it is a many-branched ulceration, as in one of my cases, where it was penniform or like a herring-bone, each rib being a long deep ulcer, the sagittal line of the vulva being the mid-rib.

Special attention should be paid to little ulcers which look insignificant and are liable to escape observation on this account, but which really, when sensitive, are of great and even grave importance, causing intense irritability of bladder or vaginismus. This kind of lupus has been called minimus, and I have not seen it grow to be considerable in extent, or maximus. The hypertrophies which accompany it are also of little bulk. In one case of intense vaginismus the ulcer was on the vestibule to the left of the vaginal orifice, about one third of an inch square, rather a superficial abrasion than an ulceration; and one might have supposed it to be a patch of eczema modified by being kept constantly moist within the vulva. It was in vain destroyed by caustics, and twice excised; a similar patch always reappearing. Another case, which I have elsewhere described, came before me as a case of irritable bladder; in it there was, at one time, a row of minute ulcers, somewhat starred in shape, about the size of coriander seeds, five in number, arranged around the urethral orifice. These ulcers one might suppose to take the place of the little softish masses of a like size seen in true lupus of the face and called tubercles, the difference arising from the heat and moisture constantly kept up in the vulva.

The ulceration affects chiefly the skin and mucous membrane and subcutaneous connective tissue, but when its ravages are exaggerated it destroys every tissue except bone. I have never seen the bones of the pelvis affected. As an illustration of the destruction and removal of every tissue except bone, I refer to a case recorded by Dr. Angus Macdonald* where the whole anoperineal region had disappeared—skin, mucous membrane, fat, cellular tissue,

* 'Edinburgh Medical Journal,' April, 1884, p. 910.

voluntary and involuntary muscle, nerves, and vessels of all kinds.

The ulceration beginning in the pudendum may be described as not indiscriminate in its attacks, but as selecting a tissue, skin, or mucous membrane, or cellular tissue, for destruction. Thus, the ulcer is frequently superficial, not perforating the skin, even though the disease is of long standing. Often the ulcer passes through the whole substance of the skin or mucous membrane, and nothing further is destroyed. Sometimes the tissue immediately below the removed integument is also deeply destroyed, leaving a pit. Or the hole in the skin or mucous membrane may lead into a great excavation, implying extensive destruction of cellular tissue. This excavation may have only a comparatively small aperture, the skin being little affected, or it may be described as an ulcer with overlapping edges, which can be displaced and the ulcer exposed, or, as it were, unfolded; the ulcer mining beneath skin which appears healthy.

An ulcer may be not a mere pit but a perforation. If it is a deep pit its walls are still ulcerated; the walls of a perforation may or may not be ulcerated. I have seen a minute perforation of the recto-vaginal septum, and also one transmitting the finger, but in this latter case the woman was syphilitic. I have, in the intra-uterine case already referred to, described perforation of the peritoneum. Perforation of a hypertrophied labium, the condition called fenestrated, is not very rare. I have not seen perforation of the vesico-vaginal or urethro-vaginal septum. Perforation occurs simulating fistula in ano.

I have elsewhere described* a pit that would hold a large pea on the left side of the urethral orifice; it yielded a copious hæmorrhage. They are seen in a labium and very characteristically in the vagina. A striking case I shall subsequently give, where, with smaller pits in the vestibule, there was a larger and deeper one in the sphincter ani, within the orifice which appeared to ordinary inspec-

* 'Edinburgh Medical Journal,' July, 1884.

tion to be healthy. A well-defined case I may here briefly state as noted in 1882.

Mrs. B—, æt. 38, has been married for twelve years and has had one miscarriage and six children, the last event being the birth of a child one year and three months ago. Menstruation began at fourteen and has been regular. She had fever in India, but has resided in Britain now for eight years. She complains of pain in the left inguinal or left iliac region, of hæmorrhoidal irritation, and of frequent looseness of bowels. On physical examination no disease was found except superficial redness of the cervix uteri without purulent secretion, and quite unexpectedly in the posterior wall of the vagina, about an inch above the situation of the hymen, an opening just admitting the examining finger into a cavity which held the greater part of the first phalanx of the index finger and fitted it like a glove. This pit was very slightly sensitive, red on surface, and no secretion was seen in it. Nothing special in the recto-vaginal septum could be made out per vaginam or per rectum. The patient had not suspected any disorder in this part. Sir James Paget was consulted in the case and agreed with me in regarding it as lupus. The patient was put into the best conditions for maintaining good general health; iron and arsenic were administered regularly; the pit was repeatedly filled with iodoform, but all to no purpose so far as the lupus was concerned, the pit remaining as before. I have seen another similar case, the pit being in the same situation, but not so deep or regular; but its further history is unknown to me.

Excavations are not uncommon in a hypertrophied labium. The greatest I have seen was in a case of lupus that may be truly called maximus. This hospital patient was a lady, and has been more or less under observation for three years since I first saw her. On the left side of the clitoris were three openings, or one opening divided into three parts by two bridges of tissue across it. About these openings there was no visible ulceration. The finger,

passed through these openings, entered a channel which gradually enlarged into a great potential cavern, as deep as the length of the finger and at least two inches broad at its upper limit, which was above the mons veneris, and in close proximity to a scar-like induration of hypogastric skin which had never been ulcerated so as to communicate with it. This interior was everywhere smooth; bleeding did not follow the digital examination. A vesical speculum was passed into the cavity, showing a reddish, not deep red, surface. Pus flowed from the opening of this excavation, but not in large quantity. This excavation was never an abscess, and the same is true of similar smaller examples of cavities in cellular tissue with contracted openings. It is plain that the disease, in this case, specially attacked the cellular tissue, leaving healthy the skin of the mons veneris and of the hypogastrium, which bounded the excavation anteriorly.

The ulceration progresses by imperceptible disintegration of tissue, not by sloughing, and it may come to a standstill, remaining unchanged for a long time—a period which may be even years. Art may contribute towards the healing of an ulceration, or it may heal spontaneously. This progress of extension or of healing is always slow, except in some cases which may be healed under treatment in the course of a week or of weeks. The healing, in cases under treatment, is marked by softening of the base and edges of the ulceration if they were previously hard, and by a healthier and more active appearance of the surface, this becoming redder if previously very pale, and less red if previously very deep coloured. The healing may go on and be complete, in parts which are still evidently diseased, as in hypertrophied parts; and of this one illustration is found in the so-called fenestræ when not ulcerated; and another evidence is found in the appearance of a new ulcer in close proximity to the seat of a former healed one.

When an ulcer in the skin is healed it may leave no scar behind it, only the surface of the skin having been

destroyed. When the whole thickness of the skin has been destroyed a common scar may be left, but generally the scar is then bluish and unhealthy looking. Not rarely the healing leaves flat pocket-like cavities in the skin or mucous membrane. On the mucous membrane I have not been able to see any peculiarity of scars. They are, indeed, often not to be found.

In contrast with these characters of lupus is the progress of cancerous ulceration by sloughing, and its never healing, if the ulcer is extensive and deep. But little ulcers, rounded and with defined projecting edges, I have seen to appear and to heal more than once, on the smooth, pale and healthy-looking surface of a greatly hypertrophied cervix uteri, the seat of rapidly advancing cancer. This kind of healing then is not in contrast with, but analogous to, the healing of lupus ulcers on parts still diseased.

In conclusion, I must mention the healthy progress towards healing made by wounds in parts affected with lupus. The ulcer looks healthy, the granulations natural, and the healing from the edges natural. Healing then, however desirable, and favorable, or satisfactory, is not proof of cure of the disease. Of course there is nothing peculiar in the healing of a wound in healthy tissue left after the removal of the diseased part.

It is to be remembered, with reference to the healing of a wound in a diseased part, that a wound in a fibroid, even though lacerated and deep, heals up readily. But the pertinent facts regarding wounds in cancer of the womb are more striking, and it is to be remarked that the healing of cancer occurs in wounds, not in spontaneous ulcerations. Lately I amputated a cancerous lip of the cervix, bigger than a hen's egg and having no neck; the wound left not only healed up completely, but the part of the stump accessible to the finger also shrunk to dimensions not much exceeding those of the corresponding part of a healthy cervix. Of the nature of the case there was no doubt. Its history, progress and histological constitution were mutually corroborative.

CASE 1. *Lupus minimus; irritable bladder; history extending over eight years; urethral caruncle removed and reproduced; ulceration at orifice of urethra; small spots of ulceration of vestibule removed and reproduced; late supervening hypertrophy of left nympha; pyonephrosis discovered in* 1877; *nephrectomy fatal in March*, 1884.—A. S—, æt. 18, servant, single, was admitted to "Martha" in October, 1876 (under Dr. Greenhalgh). No children. Catamenia commenced in thirteenth year and for one year were regular. For the last three years they have not appeared. In April, 1875, she began to suffer from pain and straining during micturition and only passed a little urine at a time. This trouble has continued since, and now she cannot hold her water longer than two or three hours. On examination a small vascular growth is found attached to the meatus urinarius. Dr. Godson removed it with a knife, the patient being under the influence of ether. On October 28th she was discharged cured.

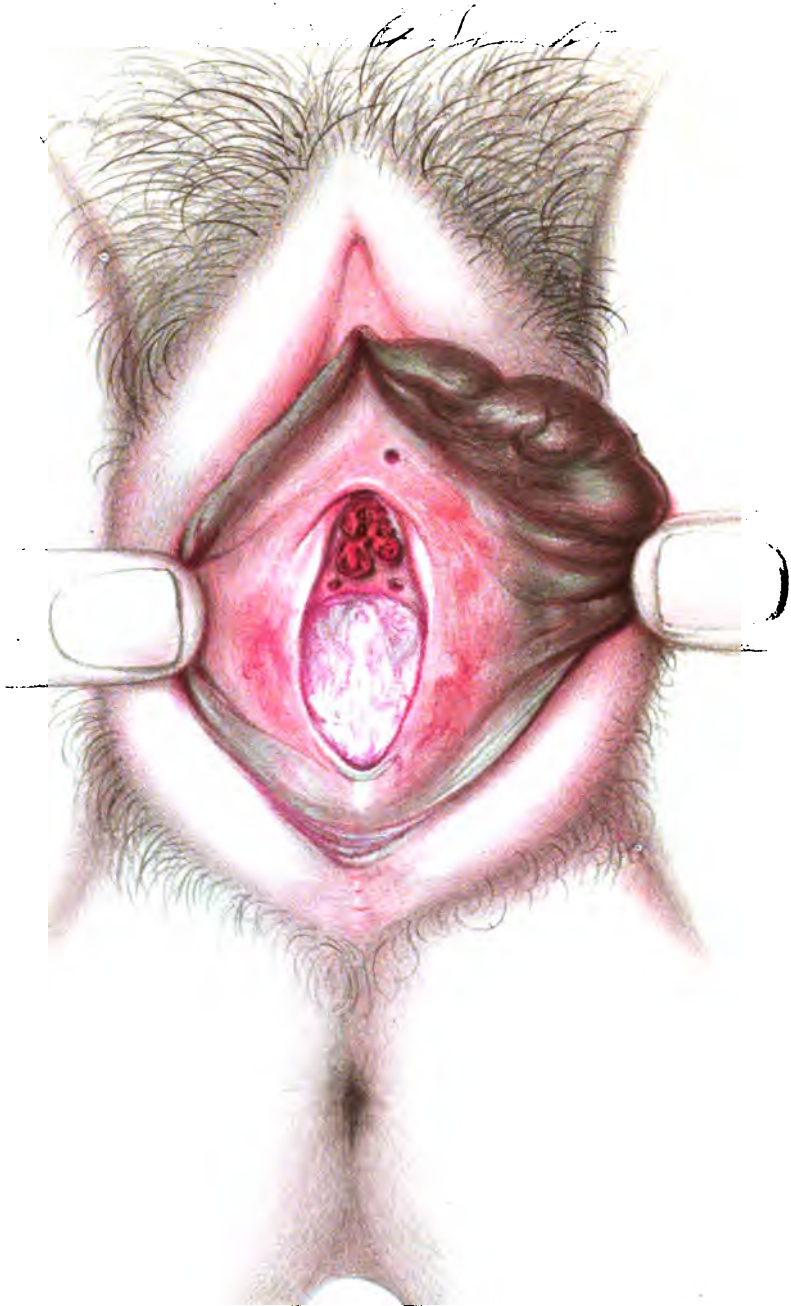
On March 1, 1877, she was readmitted. After leaving the hospital the painfulness and frequency of micturition continued much relieved for a month; they then returned and have been increasing ever since. On examination, there is found a number of vascular warty growths around the orifice of the urethra, and the margin of the hymen is serrated with long thin vascular growths. Urine 1012, much mucus, some albumen. The diseased parts were destroyed by cautery. Subsequently she had less pain on micturition and the parts were less sore. Discharged on April 6, relieved.

On May 2, 1878, was again admitted (under Dr. Matthews Duncan). A few days after leaving the hospital the symptoms returned worse than ever. She observed a swelling on her right flank four months before her readmission; it is gradually enlarging. Before she discovered the lump she suffered pain in the part for two months. It is constant, and though never very severe, has occasional exacerbations. The mammary areola is of about the area of a shilling, and the mammilla not larger

than in a male. In the right flank is a lobulated tumour, the chief lobe of which is just below the umbilicus and two inches to the right side. There is a feeling of fluid contents, good resonance below the tumour, and a streak of imperfect resonance between it and the liver. Impulse can be most distinctly obtained between the renal region behind and the front of the tumour. Around the posterior two thirds of the orifice of the urethra there is arranged, in a moniliform manner, a series of five crimson flat ulcers of about the size of coriander seeds. They are slightly raised, and have irregular, starred edges. They are supersensitive. The bladder measures five inches from the orifice of the urethra to the fundus, and is natural in point of sensibility and elasticity. The cervix uteri is very small; the probe passes into the cavity two inches and a half. There is no hymeneal obstruction. On May 9th the upper and right lump was tapped with a fine trocar and aspirator. Nothing came out. On May 13th, the urine, acid, had a sp. gr. of 1012, faint cloud of albumen, slight deposit of pus on standing.

18th.—Under chloroform, the most prominent part of the tumour was tapped with the aspirator trocar, and three or four ounces of extremely thick, viscid, purulent fluid drawn off, somewhat like putty. No pain or tenderness followed the operation and she was discharged on June 27th.

On February 12th, 1884, she was readmitted with complaints as before. She states that in December, 1878, she first observed her urine to be tinged with blood, and on standing to deposit a thick sediment. In March, 1883, she was unable to pass her water for four hours, had great pain, and it was drawn off by catheter. After this she had no difficulty in passing water for six months, when she had another attack of retention, and since then she has had three other attacks, the last five weeks before admission. Constant abdominal pain is now intense, obliging her to give up work and even walking, and she wishes some operation to be done for its relief. The pyonephrosis is considerably increased in bulk. The left



F. Godart del West Newman & Co. chrom. lith.

nympha is hypertrophied, prominent, the projecting part being bigger than a large hazel nut. The parts are too sensitive for further examination thoroughly (drawing, Plate IV, by Mr. Godart).

[Mr. Godart's drawings are intended to give only a general idea of what he saw. No minute directions were given as to the delineation of special parts. Some details are, in consequence, not given, or concealed.]

February 16th.—Urine 1019, neutral, trace of albumen, the microscope discovers in the slight deposit pus and phosphates. 17th.—Passed water as usual at 8 a.m., but at 10 a.m. was unable, and the water had to be drawn off three times to relieve pain. 18th.—Pain in urination is less, but water does not pass freely. Urine 1016, neutral, smoky, a little red, bloody, deposit, albumen $\frac{1}{20}$, microscope discovers pus and blood-corpuscles, no casts, water had to be drawn off once. 20th.—Much ropy mucous sediment in the urine. 21st.—An examination made under chloroform. On a remaining anterior portion of the hymen are two bright scarlet ulcerations of the size of a pin's head, and there is one nearly similar to the left of the clitoris. From the posterior margin of the urethra projects an intensely tender and sensitive caruncle which is in part blood red and the rest is like a translucent follicle filled with jelly. A smaller blood-red caruncle is attached to the left margin of the urethra. There is undefined redness of the insides of the labia majora.

[The nympha and caruncles were removed by Paquelin's cautery. The sores left healed well, and she was removed to a surgical ward for nephrectomy.]

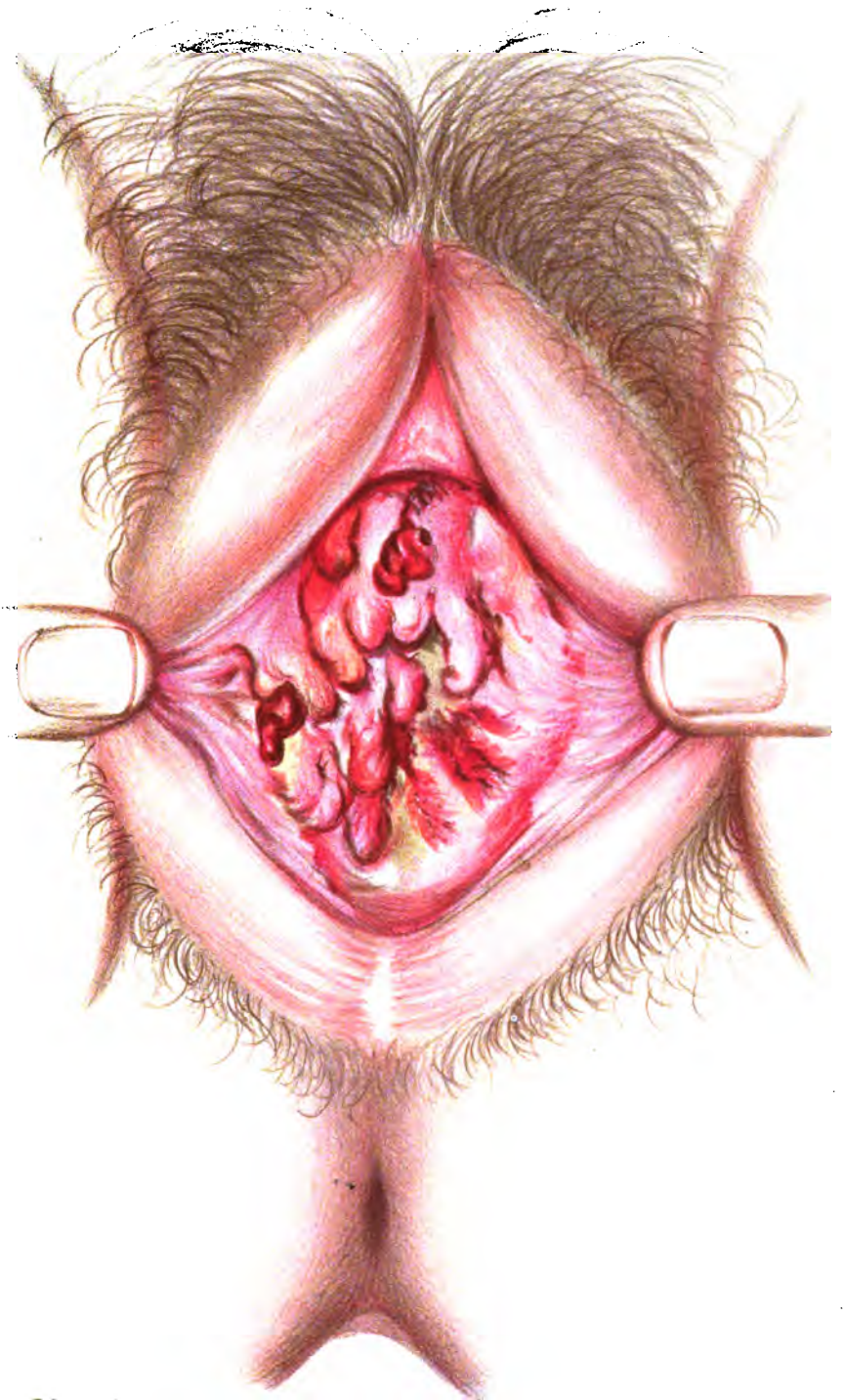
CASE 2. *Lupus; history extending over three years; large caruncular hypertrophies of orifice of vagina and of urethra; inflamed surfaces; myxœdema; diabetes; cataract.* —E. K—, æt. 41, was admitted to "Martha" in February, 1881, married twelve years, two children, the last ten years ago; labours easy, no miscarriages. Catamenia began at thirteen years, were profuse, lasting a week, little

pain; continued to be regular till her last pregnancy, but since then catamenia have not appeared. Up till birth of last child was thin, but since then has grown stouter, the lips and vulva especially thickened; joints of fingers, wrists, and ankles, swollen and frequently painful; fingers clubbed. Pains in back, knees, and legs. Very thirsty. Urine 1031, acid, no albumen, much sugar. Says she passes about six pints daily. During last three months she has not been able to retain her water after desire to micturate comes on, and in this respect she is worse when in the erect posture. For the last three years has had a creamy discharge from the vagina.

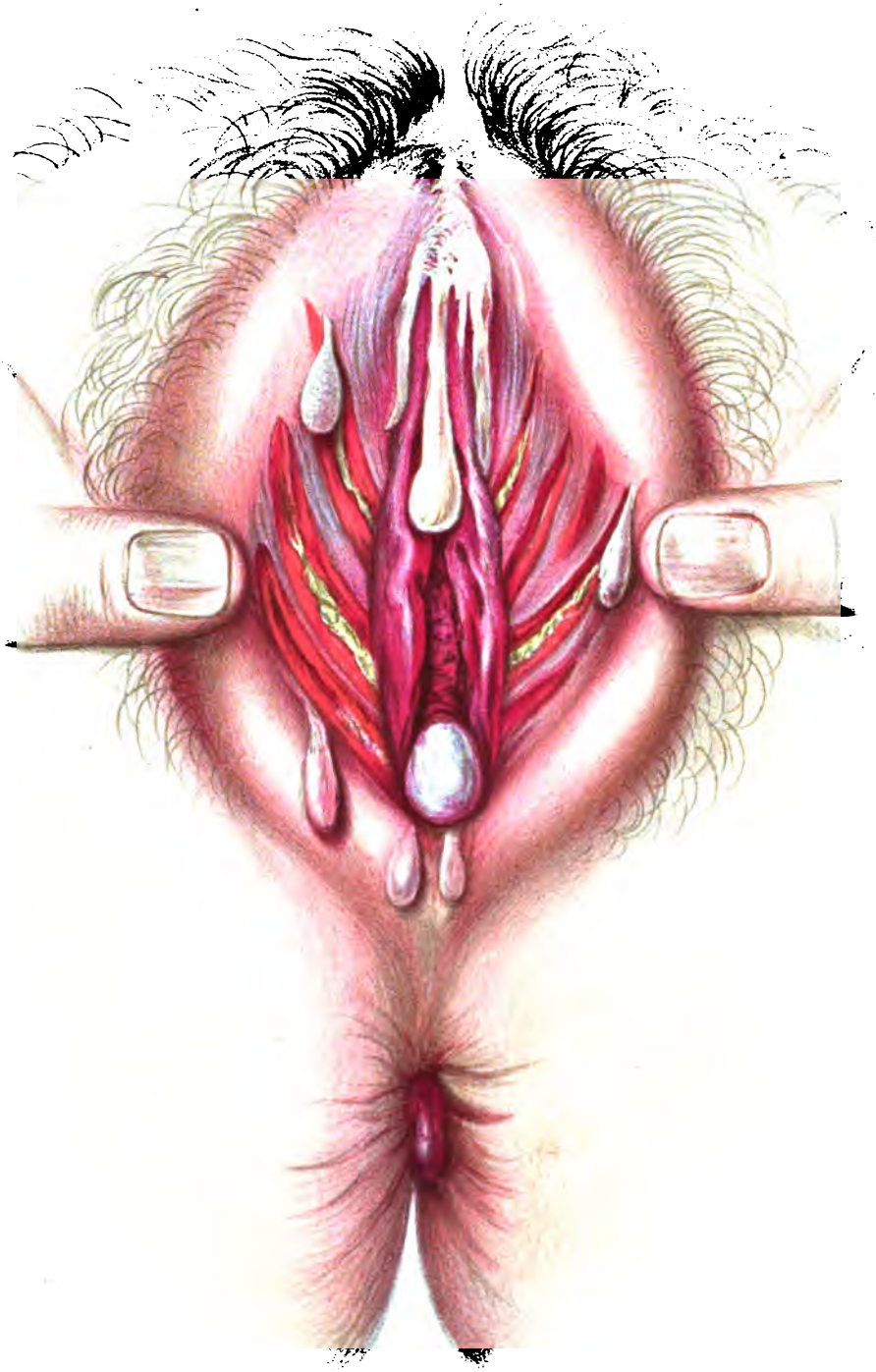
The pudendum at first sight seems natural. On separating the labia the fourchette is found entire; around the orifice of the vagina are dark red ulcerated surfaces, also similar red spots on the vestibular surface anterior to the orifice of the urethra. This orifice has attached to its posterior margin a tender red caruncle. All the parts are tender, the caruncle more so than the rest, but not extremely so. The parts are bathed with pus, which also flows from the vagina. The vagina is mottled red. The cervix uteri is filled with opaque opaline mucus. Lotio nigra was locally applied in strips of lint and improvement effected. She was soon removed to another ward to be under the care of a physician.

On December 27th, 1883, she again presented herself in "Martha" as a visitor, for examination (drawing, Plate V, made by Mr. Godart). The whole vulva is superficially inflamed. Connected with the posterior margin of the urethra is a polypoid caruncle. On the right side of the vaginal orifice is a similar sessile caruncle. Inside the right nympha is an ulceration of slight extent. The orifice of the vagina is surrounded and partially blocked by rounded masses which are red and ulcerated at parts. Pus flows from the vagina.

CASE 3. *Lupus ulcerosus; scalding pain in micturition; herring-bone ulceration affecting both sides of pudendum;*



T. Goddart del. West, Newman & Co chr-lith.



t del

West, Newman & Co chr-lith.

globose white tumours, sessile and curiously pediculated.—A. T—, æt. 52, housewife, was admitted to "Martha" on April 27th, 1881. Has been twice married; to her present husband, who survives, six years. Has had three children, the last twenty-eight years ago. No miscarriages. Catamenia, which had been regular, ceased six months ago. For the last four years has had soreness of, and discharge from, the genitals, both white and yellow. Has scalding pain in micturition. Bowels regular.

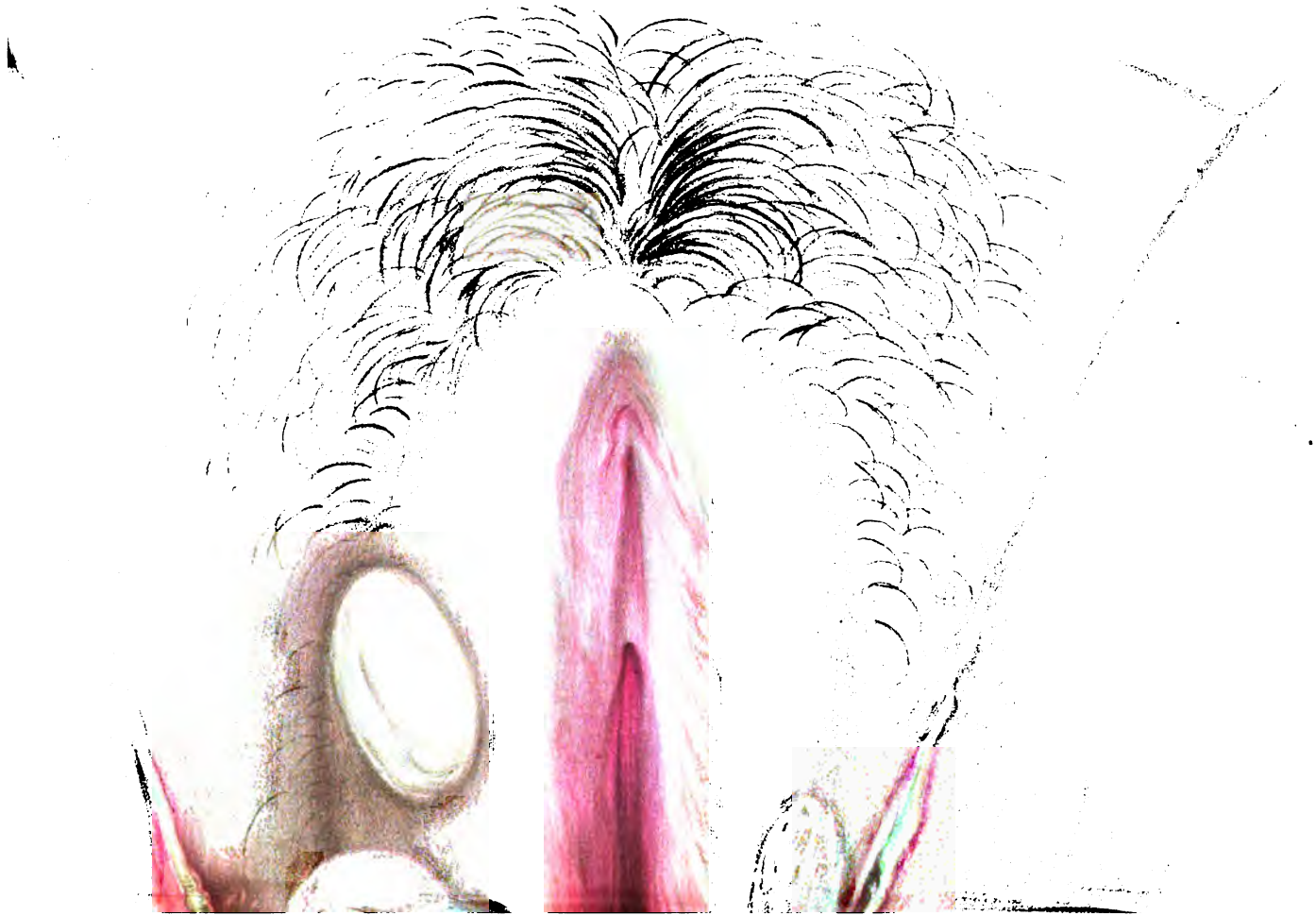
When the pudendum is exposed it seems natural; but on separating the labia the following appearances are seen (drawing, Plate VI, by Mr. Godart):—Both labia tinted slightly bluish red. Extending from the vestibule on either side of the vaginal orifice, and proceeding upwards and outwards on the insides of the labia majora, are four deep red ulcerated fissures. At several places in the bottom of the fissures is a concrete yellow or sloughy matter. The ridges of intervening skin look healthy, but are of cartilaginous hardness. About the orifice of the urethra is dark red ulceration. The prepuce of the clitoris is greatly hypertrophied and has three long and one short, round, white, vermiform, appendages, less than an eighth of an inch in diameter. The longest is more than an inch and has a globose end bigger than a pea. At the posterior margin of the vaginal orifice is a sessile globose white nodule as big as a field bean. Behind this are two smaller polypoid and otherwise similar masses. On the right labium, at its margin, are two more of these polypi, one anteriorly, the other posteriorly, and on the left labium is one about the middle. The anus is natural, with an external pile. The rectum and bladder are healthy. The vagina is closed about an inch and a half from its orifice by an ordinary senile stricture; its surface is quite smooth and intensely red and tender.

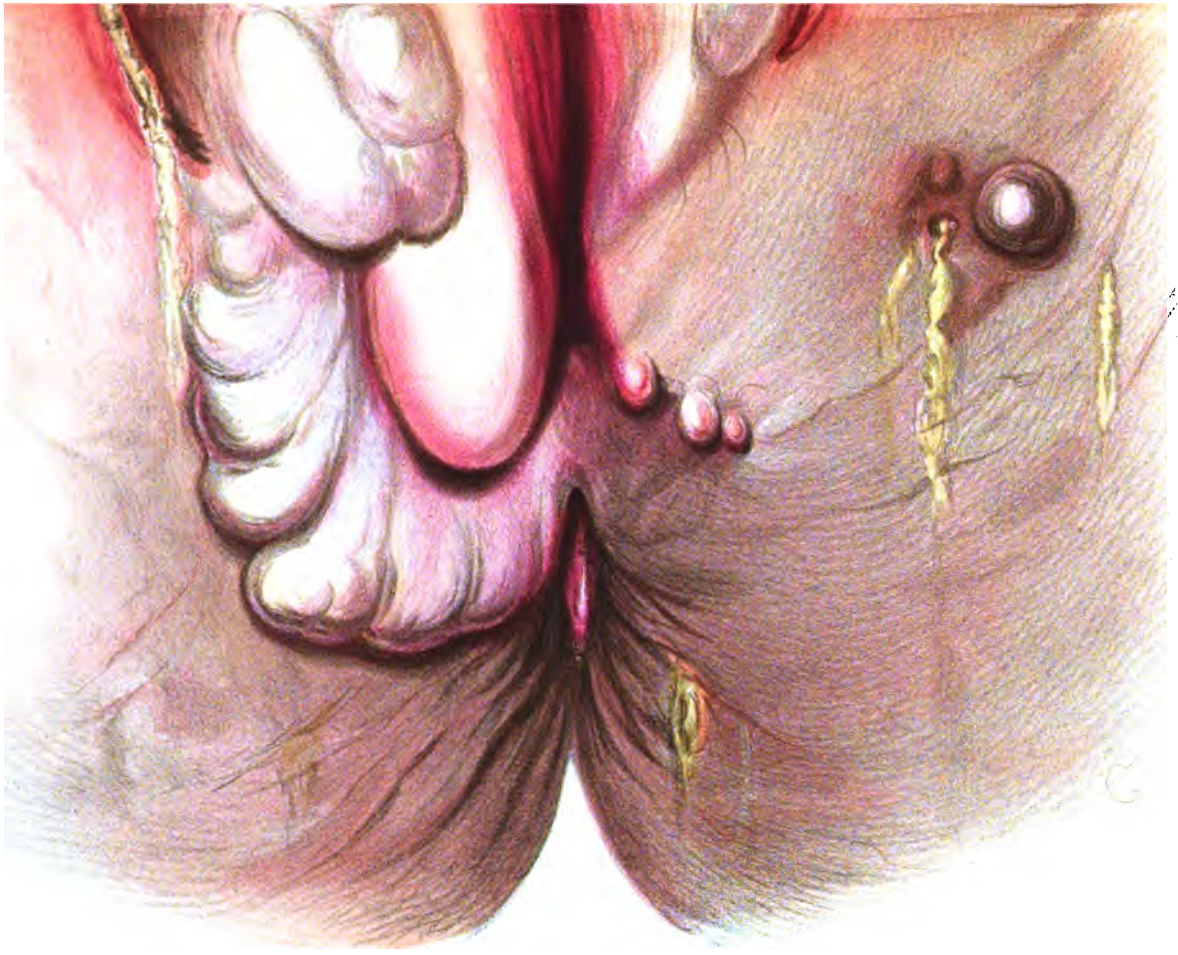
The hypertrophied parts were excised and the ulcers freely burnt with Paquelin's cautery, and the whole dressed with carbolized oil, on May 3rd. Cauterization was repeated on May 14th. Iodoform was daily dusted on

till June 6th, when glycerinum boracis was begun as a dressing. A small hypertrophy on the right labium was observed to be growing. On June 25th ulceration is reduced to a fifth of its original extent. She left the hospital about the middle of August, saying she felt comfortable and regarding herself as cured. There was then an irregularly shaped ulcer about the size of a shilling at the posterior extremity of the right labium and some much smaller patches of superficial ulceration on other parts.

CASE 4. *Lupus maximus; great hypertrophies; great excavated ulceration; brawny state of hip with suppurating cavities; extensive inflammation of skin between hips; profuse suppuration. History extending over about nine years.*—L. F—, æt. 33, was admitted into "Martha" March 24th, 1881; married eleven years since; no pregnancy. Catamenia began at twelve years of age, and have been regular till last November; since then they have come only occasionally, but at regular expected times; last menstruation a month ago. Soon after marriage had falling of the womb and was then ailing for two years. Three years later had congestion of the lungs and hæmorrhage from them. About five years ago had fistula in ano and abscesses in the groin. Is reported to have had attacks of iritis. Ulceration is described as gradually extending from the anus to the pudendum. Has undergone several operations, some for fistula in ano. Looks anæmic. Micturition easy. Bowels regular. Not emaciated. Heart, lungs, and kidneys give no sign of disease. Has been in bed for two years, and requires much attention on account of profuse purulent discharge soiling the clothes (Plate VII).

Examined under chloroform, March 26th. A little above the left pubic bone is an irregular patch of reddish-brown indurated skin, scurfy in parts. Numerous similar but small spots above the pubes. Inguinal glands not affected. The right labium is a large projecting mass, five and a half inches long and an inch and a half across





Godart del

West Newman & Co chrom-lith

at its broadest and upper part. Upon its external surface are two masses; the upper equal in size to one third of a large chestnut, and the lower that of half a large walnut; the upper is soft, the lower hard. Between the labium and right thigh is a deep ulcerated furrow, red in parts, scarlet in other parts, and at bottom crusted with concrete yellow pus. The part of the hip closely adjacent to the lower part of the right labium is raised around it into a semicircular, thick, lobulated, mass or ridge. The outer half of this mass is nearly white and very hard; the inner half less white and softer. The left labium, three and a half inches in length, is similarly but much less diseased. It has several white spots, and, at the outer border of its lowest part, an elongated, hard, whitish, projecting nodule, as big as an almond and of nearly that shape. Between this left labium and the adjacent thigh is a long deep ulcerated furrow like that on the opposite side. Between the anus and the left labium are three small nodules, brownish in parts and elsewhere whitish. The fissure between the hips is deep, and, from their swollen condition, it extends to the base of the sacrum. The hips are in contact with one another up to the base of the sacrum, and, where in contact, are of a bright red colour, moist, raw-looking over the sacrum, and secreting a laudable pus copiously. From about an inch behind the anus forwards to near the nodules behind the labia already described, is an irregular ulcerated fissure secreting a serous pus copiously. The finger introduced into the rectum discovers nothing like a sphincter, or a stricture, but feels everywhere a rugged surface with longitudinal furrows and ridges. These latter, viewed by speculum, are red in colour. The hips themselves, especially near the outer gluteal fissure, are of brawny hardness, discoloured brown, and are somewhat tender. Nothing like an abscess can be detected, but there are many openings, some easily seen, others discovered with care; they yield, intermittingly, a thin serous pus. These openings do not disturb the uniformity of the swollen surface and have

no redness around them. On stretching out the skin of the hips, little furrows are unfolded having minute openings in them. A probe passes into any of these openings and goes in from a quarter of an inch to a whole inch. At the junction of the left hip and thigh, and an inch and a half from the lower margin of the left labium, is a hard, brown, prominent, mass, the size of the tip of the finger, soft, whitish on the surface on its top. The vagina is short and replete with thin serous pus, otherwise healthy. At its orifice anteriorly is a hypertrophied caruncular mass. At its ostium, on the left, is a shallow excavation which feels rough and ulcerated. The cervix uteri is small. The clitoris is not hypertrophied. At its left side is an opening, bridged over by two beams of mucous membrane, which show no ulceration. This opening conducts the finger into a channel in front of the symphysis, and on into a cavity beneath the mons veneris, at least two inches broad and extending as high as the scar-like indication in the hypogastrium. The surface of the cavity feels like a mucous surface; and, seen by a small vesical speculum, is bright red. Pain over the mons veneris is complained of. Portions of tissue were removed for histological examination.

Little was planned and nothing substantial effected for the patient's relief, for she soon left the hospital, declining surgical interference. In the end of 1883 I heard that her health was improved and her sufferings diminished.

Case 5. *Lupus; irritation of pudendum; pain on micturition and on defecation; pit-like ulceration in vestibule; pit-like excavation in sphincter ani; vascular growths of urethral orifice.*—C. N—, æt. 29, single, was admitted to "Martha" on September 1, 1884, under Dr. Godson's care; has had no pregnancy. Catamenia began at twelve and last for about six days, without much pain, and recur regularly. She looks young and healthy, has a fair complexion and reddish hair. About three years ago began to suffer from headache, sleeplessness, nervousness,

constipation. About two years ago, after a straining effort, began to have a dull aching in the left iliac region, which, with intermissions, still continues. Has latterly been treated for displacement of the womb and has worn various pessaries, with no good result, and they have caused a discharge. For about three weeks has had pain and difficulty in micturition and defecation, and bright blood is observed in the motions. The discharge from the privates is slightly pink-stained by blood. No specific disease is discovered on making the usual inquiries. Dr. Godson discovered a retroverted mobile uterus, and, as the private parts were tender, put her under an anæsthetic for further investigation. Several small red growths protruded from the orifice of the urethra; a deep ulcer concealed by the clitoris and another on the left side of the vestibule. The ulcers and growths bled readily when touched. All were cauterized by Paquelin's cautery at red heat on September 19th. Just inside the anus, posteriorly, was an ulcer with ragged edges deep enough to admit the end of the index finger. Her pains were much relieved by the treatment.

She came under my care on October 2nd, and I found the following state. Between the glans clitoridis and urethra are two deep ulcerated pits, their orifices when the labia are held apart having an area equal to that covered by a split pea; they do not bleed when touched. The orifice of the urethra presents a healthy-looking, healing ulceration. On the left side of the orifice of the vagina, extending outwards from the outer margin of the vagina, is an irregularly shaped ulcer of about the extent of a fourpenny piece. There is another small, superficial ulcer in the fossa navicularis. Just inside the anus, which looks quite healthy, is a deep excavation into the substance of the sphincter, accommodating three fourths of the last phalanx of the finger. The ulcerations are all slightly tender and have a healthy appearance. The inguinal glands are not affected. The skin of the body generally is healthy. There is no evidence of syphilitic infection.

It was resolved, in consultation with Mr. Cripps, to divide the sphincter ani.

Addendum, January 16th, 1885.

Nov. 1st, 1884.—The ulcerations in the triangular vestibule are as before. There is an irregularly shaped ulcer about half an inch in diameter to the right of the hymen and close to it. Nearly on the same part on the left side are three small, red projections of the size of a coriander seed. The anus appears healthy. Inside it the finger discovers, in place of the deep pit-like excavation, a deepish ulcer with overhanging indurated edges. All the ulcerations, with the exception of that on the right side of the vaginal orifice, are cauterized with the red-hot iron. Antiseptic dressings are regularly used.

Jan. 13th, 1885.—After having been at home for some time she returned for examination this day. The uppermost vestibular ulcer is quite healed, but a pit is left which marks its situation. There is a deep pitted ulcer on each side of the urethral orifice and these two ulcers are separated only by the right side of the urethral wall, the left side being destroyed by ulceration, which makes the urethra, as it were, open into the left pitted ulcer. The ulceration on the right side of the vaginal orifice is quite healed. There is no induration about any of these ulcers. The ulcer inside the anus is now superficial, its edges not overhanging as before. The coriander-seed hypertrophies on the left side of the vaginal orifice are as before.

Dr. Horrocks said that he had had a case under his care for nearly two years. She was a single woman, and had never been pregnant. Her complaint was pain in the privates and scalding on micturition. On examination small ulcers were seen about the base of the hymen and the fossa navicularis. Suspecting syphilis, although the glands in the groin were not enlarged, and there was no history of rash or sore-throat, mercury was given internally and lotio nigra applied externally. She did not improve, and caustics of various kinds were then employed, but she always complained of pain and said she was no better. The hymen was apparently entirely eaten away, and along the line

of its previous attachment were small red nodules, with here and there a tiny ulcer. These nodules were very different from carunculæ myrtiformes. Moreover, there were no lineæ gravidarum and the cervix was nulliparous in character. Finally, as she got no better and the case was looked upon as lupus, she was taken into Guy's Hospital under his care ten days ago for the purpose of having these lupoid tubercles removed. Eight days since he removed them by scraping with a sharp curette, and by cutting away with the scissors one or two of the larger nodules. The bleeding was so excessive that he had to ligature one or two vessels. The patient had been progressing very well, but was still in the hospital. Dr. Horrocks asked if Dr. Duncan had had any experience in the treatment of these cases by scraping, and if so with what result. He also asked what was the best mode of treatment.

Dr. GANDY inquired of Dr. Duncan whether there was any fœtid odour or other characteristic discharge about this form of lupus; also if he (Dr. Duncan) could explain the cause of such profuse hæmorrhage from so apparently small an ulcer, with so little physical evidence of disease. The symptoms Dr. Duncan described reminded him of a lady to whom he was called some few years ago. She was about thirty-five, married, in fairly good health, and was suddenly seized while at a theatre with very profuse bleeding. She managed to return to her home at Norwood, and he arrested the hæmorrhage with subcutaneous ergotine. He was unable (himself or the consultant to whom he sent her afterwards) to detect the cause, and it now occurred to him, after hearing Dr. Duncan's interesting remarks, that this bleeding may have had such an origin as he had described. He might say that this lady always suffered during connection; she had not to his knowledge ever had any return of the bleeding.

Dr. MATTHEWS DUNCAN used the term lupus because others did so. West in his 'Diseases of Women,' one of the earliest English notices of the disease, used this term. Esthiomene was an awkward word. Lupus expressed the great eroding character of the disease which had been under consideration in the paper. Lupus included ulcerations, inflammations, hypertrophies, variously combined, and which were not cancerous, not epitheliomatous, not syphilitic. It might turn out that several diseases were included in this comprehensive term. At present they were combined for description, on account of their apparent similarity. They were far from being so uncommon as was supposed.

CASE OF FIBROID TUMOUR COMPLICATING DELIVERY TREATED BY ENUCLEATION.

By William H. Day, Norwich.

Except that the patient did not die undelivered, but survived some twenty-eight hours; except also that the child was born alive and is still living, there is but small satisfaction in producing this record of non-success.

A. G—, æt. 34, sixth pregnancy. This case presented some doubtful features when it first came under notice. Some weeks before her confinement I was summoned on account of pains which she supposed to be those of labour. Vaginal examination, however, did not confirm the notion, but an unusual condition of things was discovered—a large elastic mass could be felt through the wall of the uterus high up in the pelvis, partly occupying the brim, giving one the impression of a placental presentation, but on no part of this mass could the os uteri be found, unless what seemed a vaginal fold just behind and rather below the pubes could be the anterior lip. This, however, could not be traced to its circumference, but seemed to lose itself on the presenting substance. Pains continuing over several weeks, gave frequent opportunities of exploring but with no satisfactory result. No further presentation could be detected.

A week before labour, the membranes ruptured spontaneously, and water apparently discoloured by meconium was discharged, but beyond greatly alleviating her pains this caused no alteration in the state of things in the pelvis. The fœtal heart and placental souffle had long since dispelled any doubt as to pregnancy.

On 6th of October labour pains came on, and what was

previously supposed to be the anterior lip could now be felt behind the pubes, contracting during a pain; still the circumference of the os could not be traced, and there was no change in the presenting part, save that it seemed to bulge and become more tense during a pain.

I watched the case for some hours and as, notwithstanding a fair amount of regular uterine action, no change whatever took place, I was glad to seek the opinion of my friend Mr. Muriel (valuable from his large experience in obstetrics), who had also seen the case with me before labour came on.

An entire absence of hæmorrhage, now that uterine action was well established, precluded the likelihood that any portion of the presentation was placental, so it was determined that I should pass my hand into the uterus, if possible, and gain what information I could thereby.

Guided by the contraction of the anterior lip I passed my hand, with some difficulty, behind the pubes into the uterus, when a breech was discovered high up in the uterus, and I could just hook my finger round the thigh, but further progress was barred by the existence of a large tumour bound down to the posterior surface of the uterus which entirely prevented any manipulation to deliver by the feet, even had it been possible for the head to pass by such a mass while it remained *in situ*. Traction with the finger round the thigh was as useless as it was painful to the operator. To press the tumour forcibly up, as suggested and successfully practised by Dr. Playfair, seemed impossible, so much was it part and parcel of the womb itself and could, I think, have led to nothing but disaster.

A slightly elevated ridge seemed to indicate the position of the posterior lip, and burrowing round it with my finger I managed to insinuate it between the tumour and the internal surface of the uterus, and having in mind a case in which I successfully enucleated a fibroid larger than a cricket ball, from the fundus of the uterus after delivery at full term, I proceeded to attempt enucleation

here. For a while all went well. I worked carefully and successfully round the tumour without any hæmorrhage to hinder or alarm us, until I had got three parts round it, when, on account of its size and its mobility (now that it was so much detached), I could reach no further round it, unless it was dragged downwards for me. An attempt to do this with the forceps failed, so while I retained my hold on the tumour, which but for the remaining adhesions would have been expelled by the uterine efforts, Mr. Muriel left to get some strong hooks.

On his return he examined and found that the child had so descended with the tumour that he could grasp a leg, and without much difficulty he delivered. The child was living. Passing my hand into the uterus, and finding the placenta detached, I removed it with a pain. There was now no difficulty in drawing down the tumour with the hook and separating it from its remaining connection.

The patient was much exhausted by the operation, which must have lasted an hour and a half if not longer, but there was no hæmorrhage; she took nourishment, passed water, and was fairly well for twenty-four hours, when diarrhœa came on; rapid prostration and death followed twenty-eight hours after delivery. A post-mortem was not obtained.

The tumour, which was ovoid in shape, weighed three and a quarter pounds, and was so yielding in character that it gave the impression that it was fibro-cystic, and that its bulk might have been diminished by puncture with a trocar. An incision into it, however, showed it to be entirely fibroid in its nature. It would nearly have filled an ordinary-sized gentleman's hat.

The fact of its being a breech presentation precluded the possibility of recourse to the forceps or craniotomy, and notwitstanding the sad termination of the case I hold the opinion that efforts at enucleation were justifiable, and gave greater chances of a successful issue to both mother and child, than what seems to me the only alternative, the Cæsarian section.

The two cases of enucleation that have come within my experience, during and directly after parturition, have shown that the chances of hæmorrhage are not necessarily very great.

Dr. Braxton Hicks thought that it was very advantageous, in the event of meeting with such a case, that we should know beforehand the best method of treating tumours obstructing labour situated in the neck of the womb. He called to the recollection of the Society a case he had read before it some years ago, in which he divided the capsule by a bistoury vertically and enucleated the tumour from its own capsule, with complete ease and success. This he thought best in sessile or embedded cases. He called attention to the work of Dr. Chahbazian on the 'Fibroid Tumours of the Neck of the Womb in Pregnancy and Labour;' and to the paper of Dr. Paul Mundé, of New York; and to a case of Dr. Fry's in the 'Lancet' of last year. He thought the general opinion was in favour of enucleating the sessile forms from their own capsule, which in all the cases reported was not a difficult operation. He referred to cases where delivery was urgent, and action of some kind imperative.

JUNE 3RD, 1885.

JOHN B. POTTER, M.D., President, in the Chair.

Present—40 Fellows and 7 visitors.

Books were presented by Dr. F. Ahlfeld, Sir T. Spencer Wells, Bart., and the Council of University College. A case of obstetrical instruments was presented by the Committee of Management of the City of London Lying-in Hospital.

John Frederick Briscoe, M.R.C.S., and Adam Young, L.R.C.P. Lond. (Sevenoaks), were admitted Fellows of the Society.

Charles Henry Hough, M.R.C.S. (Derby); Sydney R. Lidiard, L.R.C.P. Ed. (Hull); and Charles Booth Meller, L.R.C.P. Ed. (Cowbridge), were declared admitted.

The following gentleman was proposed for election:—William Charles Everley Taylor, M.R.C.P. Ed. (Scarborough).

PESSARIES.

DR. GERVIS exhibited some pessaries made of glycerine and gelatine, each containing two drachms of glycerine, which he had been lately using in cases of uterine congestion, in place of cotton-wool "tampons" soaked in

glycerine. These pessaries involved no trouble to the patient in making or introducing, as was generally the case with the cotton-wool pledgets, and he had found them equally efficacious for the purpose of uterine depletion. The specimens exhibited were made for him by Messrs. Rouse, 12, Wigmore Street.

SPECIMEN SHOWING THE RELATIONS TO EACH OTHER OF INFLAMMATION OF THE ENDOMETRIUM, FALLOPIAN TUBE, OVARY, AND PELVIC PERITONEUM.

By ALBAN DORAN.

THIS specimen is referred to in the fourth edition of Mr. Lawson Tait's 'Pathology and Treatment of Diseases of the Ovaries,' p. 68. The patient had suffered from chronic metritis with severe menorrhagia. A cyst in the region of one tube was detected, pelvic peritonitis set in, the cyst disappeared and then reappeared. These symptoms all recurred and the patient died. The left tube * was found to be dilated, ruptured, and adherent to an enlarged ovary.

I have closely examined this specimen, which is now in the museum of the Royal College of Surgeons, Pathological Series, No. 4565A. Considered together with the history of the case it demonstrates the sequence (often, fortunately, interrupted) of endometritis, salpingitis, oöphoritis, and perimetritis.† In all probability, the series commenced with vaginal catarrh. The anterior wall of

* Inadvertently described as the *right* tube in the passage above quoted.

† "General" medical writers object to these special terms, but they are very convenient for the present purpose. "Endometrium" is advisable as the lining of the uterine cavity is more than a mere mucous membrane. Of course terms like ovaritis and vaginitis are inadmissible.

the uterus has been cut away to expose the diseased endometrium. The tubes have both suffered from inflammatory disease, the left having become obstructed and dilated, at length giving way. The right tube is very slightly dilated, but its fimbriæ are adherent to the surface of the right ovary, and the walls of the hydatid of Morgagni are thickened by inflammatory changes. The left ovary has become enlarged and disorganised by inflammation; it had been for the greater part converted into a single cyst, as is often the case in chronic öophoritis. The right ovary has been protected from the extension of disease by a timely sealing up of the fimbriæ of the right tube. Lastly, shreds of lymph hang from the peritoneum investing the uterus; there were originally broad bands of adhesion over the left tube and ovary, but these have been dissected away to display the diseased structures.

This specimen proves how readily perimetritis may be set up by inflammatory processes spreading from the uterus to the pelvic peritoneum through the tubes. Probably this is the usual cause of perimetritis. For the tubes are sometimes morbidly patent and certainly sometimes naturally patent; then they constitute the easiest channels of transmission of disease from the uterus to the peritoneum. Then endometritis is very common and often neglected, whilst perimetritis is frequent. Now, the intermediate condition, salpingitis, is known, through the researches of Dr. Kingston Fowler* and the operative experience of Mr. Lawson Tait, to be much less rare than was till recently believed. They both describe numerous cases of the severe forms; but if pyosalpinx be frequent, mild salpingitis must be still commoner. Hence there is reason to believe that it is often overlooked in necropsies on cases of perimetritis, for catarrhal disease may leave but scanty traces of its existence after death. This is the case with coryza, which nevertheless causes considerable feverishness and great inconvenience

* 'Proceed. Med. Soc.,' vol. vii, p. 441.

to the patient. When that disease is chronic, the breath often becomes fœtid through decomposition of tenacious mucus exposed to atmospheric air. So when salpingitis becomes chronic, the morbid mucus may undergo decomposition through germs entering from lower down in the genital tract.

In salpingitis the fimbriæ generally adhere and seal up the tube, preventing further mischief, as seen on the right side in this specimen; unless the tube dilates and bursts, as seen on the left side. But closure of the tube is by no means an invariable result of salpingitis, and when it does not occur the morbid fluid in the tube is poured over the ovary and pelvic peritoneum. Diseased products may also reach the same destination through a healthy patent tube. The oöphoritis of gonorrhœa is very probably caused in this manner, though not invariably, since, if at all chronic, gonorrhœa is very apt to make the tube unhealthy, that is, to cause salpingitis, then oöphoritis follows from extension of inflammation and not from transmission of fluid.

The physician or surgeon, whether "general" or "special" should never forget that the genital tract of a woman leads by two highways into the peritoneal cavity. Hence catarrhal disease of the vagina or uterus must never be looked upon as a trifling affection, nor must the gynæcologist be suprised if "minor" cutting operations about the uterus be followed by complications often capricious but always serious.

Dr. GERVIS thought the sequence of events illustrated by Mr. Doran's specimen of great interest. Recognising in cases of subovaritis the almost invariable precedence of some uterine malady he had long taught that it was of little use treating the ovarian congestion and symptoms while the uterine affection continued. Indeed in many cases when the uterine disorder was cured the ovaries would appear to recover of themselves.

Dr. ROUTH said Mr. Doran's case was of the greatest importance as proving in the most incontrovertible manner and to ocular demonstration, that certain forms of endometritis could and did give rise, by continuity of surface and extension, to

pyosalpingitis and peritonitis. It proved, moreover, that endometritis may not always be so trifling an affection as was believed by some obstetricians, in fact not to be dignified as a disease. He stated further that on one occasion he was consulted by a lady (chiefly, he believed, because she was without a family) for such a condition. This was a case, the previous history of which denoted an acute attack of endometritis and ovaritis. He examined her very carefully and found an anteverted uterus; much pain on passing the sound, which was followed by blood and muco-pus; and an enlarged tender left ovary. The cervical opening was excoriated. Looking on this case as one which would require consecutive treatment he stated it as his opinion that he could not cure her, he feared, before two or three months. She was rather alarmed at this opinion, and although he believed she followed out the treatment he had recommended for several days, she consulted also an eminent obstetrician of this town. Two months afterwards she wrote him a civil letter stating what she had done, and adding that she had not returned to him because this eminent gentleman told her she was perfectly healthy and had nothing at all the matter with her. He (Dr. Routh) of course could not know what examinations were made and whether the speculum was used, but simply wrote back stating in detail what he had found, and which, in his opinion, constituted real disease. If she was in such perfect health, why had she consulted him at all? At any rate this case of Mr. Doran's proved that in some of these cases, to state that endometritis was not disease was an error. Not to treat it might even be considered criminal. He remembered an exactly analogous case which he had heard Mr. Lawson Tait relate. A gentleman with gleet married. The history of his early married life proved that he had communicated gonorrhœa to his wife. This produced in its turn acute endometritis, which passed upwards to the tubes and induced pyosalpingitis. Fortunately, however, Mr. Tait was able, when called in at this stage, to diagnose the condition, and relieved her by operation, and so saved her life. In this case, however, as in many others, it could be doubted that if the early symptoms had been treated (supposing she had then been seen by a medical man) the pyosalpingitis might never have occurred.

Dr. CHAMPNEYS ventured to suggest that Dr. Routh had not proved his proposition, "that some eminent practitioners thought endometritis was not a disease and required no treatment." All that Dr. Routh's account could show was that the eminent practitioner had not discovered the disease diagnosed by Dr. Routh.

Mr. W. S. A. GRIFFITH could not entirely agree with Mr. Doran's description of this specimen; it was not so much ovaritis as an extensive peri-oöphoritis, or perimetritis that had

occurred, a complication long ago pointed out and demonstrated by Bernutz as frequently occurring by a direct extension of the inflammation from the vagina or uterus to the peritoneum. Mr. Doran's curt disposal of metastasis as a method by which ovaritis may arise as a complication of a vaginitis was unsatisfactory; there could be no doubt that, in the male, orchitis arose in this way, and there was no reason why "feminine orchitis" or ovaritis should not also. Some speakers were arguing that in this specimen the cycle of inflammations commenced as a vaginitis. Of this there was no evidence in the specimen, nor was there any history of it.

Dr. Graily Hewitt suggested that in some of the cases when pus was found in the Fallopian tube it was probable it had passed into the tube from the uterus. He had seen cases of retention of puriform fluid in the uterine cavity with occasional gushes of discharge therefrom, and it was, he considered, highly probable that in some such cases the pus passed into the tube.

Dr. Cleveland deprecated the taste that would lead a Fellow of the Society to sit in judgment upon an eminent anonymous member of the profession because he happened in a particular case to have expressed an opinion widely different from his own. Surely under such circumstances where nothing is proved, the good faith and professional opinion of one eminent person were as much entitled to our credit as those of another.

Dr. John Williams said the occasion of extension of inflammation from the vagina and uterus to the tubes, ovaries, and peritoneum was well known. Everyone present had seen cases of acute vaginitis, in which the inflammation extended upwards to the uterus and peritoneum. This was pointed out by Bernutz and Matthews Duncan. Indeed Duncan maintained more than twenty years ago that perimetritis was the result of extension of inflammation from the uterus. Mr. Doran's specimen was an excellent illustration of this extension, but there was nothing new in this theory of the causation of perimetritis.

PERIMETRITIS.

Mr. W. S. Griffith showed a specimen of large serous perimetritis, which had been described by him in vol. xviii of the 'St. Bartholomew's Hospital Reports.' He brought it forward to show what a large perimetritis was, how it might cause complete obstruction of the bowels, and how a serous, like a purulent, effusion, might evacuate itself by sloughing processes.

ON SEROUS PERIMETRITIS.

By JOHN WILLIAMS, M.D., F.R.C.P.,
OBSTETRIC PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL.

IN the following paper I do not propose to treat the whole subject—serous perimetritis—but to record three cases which have come under my notice, together with some inferences which may be drawn from the observations made in them.

CASE 1. *Serous perimetritis; tapping; death; autopsy.*—L. W—, a widow, æt. 30, a lady's maid, was admitted into University College Hospital under the care of Dr. Graily Hewitt on February 19th, 1882.

She stated that a month before she was attacked with shivering fits, accompanied by "frightful pain" in the lower part of the abdomen and back, more especially in the right iliac region. In consequence of this she kept her bed for two days. A day or two afterwards menstruation set in, and it was accompanied by more pain than usual. Some days afterwards she sought medical advice and was told to use hot water injections. She tried these for a week, and then she found she was unable to pass the syringe owing to some obstruction in the vagina. During this time she suffered from constipation and great pain on defæcation. Micturition does not seem to have been interfered with until two days before her admission. On February 17th she walked ten or twelve stairs to her bedroom; when she got there she felt as if something had burst suddenly in her inside, and she immediately became giddy and fainted; the pain passed at the same time from the right to the left side. On the 19th she was brought to the hospital complaining of severe

pain and retention of urine; two pints of urine were drawn off. On the same day Dr. Hewitt made the following note:

"Lower abdomen very sensitive to touch. Complete examination not practicable owing to tenderness, but there appears to be a hard mass, larger in the left than in the right side, filling the two lateral and median hypogastric regions. There is a puffy condition of the abdominal integument over this region.

"There is a protuberance the size of an egg—compressible—at the vulva, formed by eversion of the posterior wall of the vagina. Through this can be felt a very hard, smooth, resisting mass, of very great size, which might be a tumour, or an enlarged retroverted uterus, or an effusion from hæmatocele. The os uteri is reached with the greatest difficulty, and is found to be about half an inch above the top of the symphysis pubis. The mass seems to be continuous with the cervix uteri. The catheter was passed and six ounces of urine withdrawn."

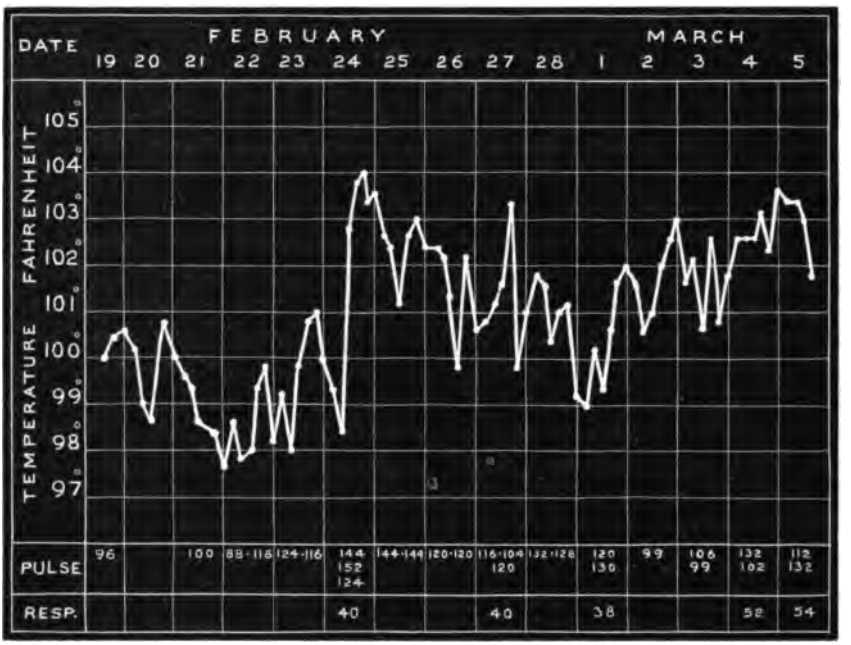
At 9 o'clock the same evening I examined her under the influence of chloroform and found the condition described by Dr. Hewitt. The uterine sound was passed, and it was found that the whole of the uterus was above the brim of the pelvis and close under the abdominal wall; its canal measured three inches in length. The tumour causing the protrusion of the posterior wall of the vagina was in its lower part soft and elastic, and clearly contained fluid; on pressing firmly with the finger and displacing the fluid the upper part was found to be firm and resistant. An aspirating needle was passed into the protruding part and three ounces of clear straw-coloured fluid was drawn off; the needle was then withdrawn and introduced into the mass higher up and about an ounce of fluid of the same character obtained. The abdomen was everywhere resonant, over the tumour as well as in other parts. She was relieved and slept well after this.

On the following day the bowels were relieved by castor-oil and an enema. She then complained of severe

pain and tenderness over the whole of the abdomen, which was greatly distended.

On the 23rd diarrhœa set in; stools were passed involuntarily, and she complained of frequent spasmodic attacks of pain, great thirst, extreme tenderness and distension; no vomiting. In the evening she had a rigor.

After the tapping the swelling diminished in size, and on February 27th the protrusion of the posterior wall of



the vagina had entirely disappeared, while the firm mass filling the upper and posterior part of the pelvis remained much as before.

From the time the diarrhœa set in she became gradually worse; the tympanites, the fever, and the diarrhœa continued; the pulse became more rapid, the breathing more difficult, the patient feebler and feebler, until she died on March 5th, sixteen days after admission.

Autopsy (twenty-three hours after death).—Abdomen greatly swollen. On opening it the intestines, especially the transverse colon and the sigmoid flexure, were found much distended with gas and injected. On lifting the omentum the uterus was found much enlarged and drawn up out of its place, and the small intestines firmly adherent to its fundus. In attempting to separate them a small abscess, containing about four drachms of thick purulent matter, situated on the inside of the right ovary, was burst. A large mass was apparent behind and to the left of the uterus; on making a cut into it a cavity the size of a fœtal head was disclosed, containing an orange jelly-like substance, apparently coagulated peritoneal fluid. This filled the cavity, which was the cavity of the pelvis converted into a closed sac by the matting together of the intestines and uterus forming its roof. The peritoneum lining it was at its thinnest part at least an eighth of an inch in thickness. The right ovary had no connection with it. The uterine cavity was three inches in length. There were no signs of general peritonitis, but the peritoneum was perhaps a little more opaque than usual.

Case 2. *Serous perimetritis after labour; tapping; subsequent rupture through the posterior wall of vagina; relapse; recovery.*—S. H. W—, æt. 21, was admitted into University College Hospital on the 27th September, 1882.

She was delivered on July 14th of her first child; labour easy, lasted six hours. She kept her bed for fourteen days. During this time she complained of soreness and tenderness of the abdomen, and flatulence. There was a considerable amount of greenish discharge, having an offensive odour. Three days after she left her bed she passed a large clot and lost a quantity of blood; the bleeding lasted about an hour, but the discharge continued and was blood-stained. Two days later she went out for a drive and felt better for it; but subsequently

she became weaker and suffered from sickness and loss of appetite. Three weeks after getting up she took to her bed again, complaining of tenderness of the abdomen and pain of a paroxysmal character. She had no rigors, but she was continually sick. She continued much in this state until September 27th, when she began to suffer from a sensation of bearing down about the rectum and perineum with swelling of the labia and perineum. This lasted for three days, when a swelling behind the posterior wall of the vagina was tapped and about two ounces of clear serum withdrawn. This relieved the pain and bearing down. Three days afterwards she was admitted into the hospital.

The following note was made of her state on admission:

On the right of the median line is a pretty firm swelling, extending two inches and three quarters above pubis, and two and three quarters to right of middle line. It is tender, fixed, and resonant, but less resonant than the rest of the abdomen, which is distended and tympanitic. There are a few small external piles and a great deal of œdema of the posterior part of the labia and perineum. The posterior wall of the vagina projects through the vulvar orifice. On introducing the finger into the vagina the posterior wall is found pushed against the pubis; the swelling formed by it is smooth, convex, and elastic; the posterior *cul-de-sac* is obliterated. The cervix is high, close behind the pubis and about on a level with the middle of the symphysis; it is apparently fixed, and the parts on each side of it are more resistant than the swelling behind the vagina. The rectum is behind the swelling and pushed to the left and flattened. Fluctuation is obtained by recto-vaginal bimanual examination, and an indistinct impulse is felt on abdomino-vaginal examination.

On pressing above the pubis the fundus of the uterus can be indistinctly felt in the middle line; the uterus is slightly moveable, straight; the sound enters for two inches and a half.

On October 1st a considerable amount of discharge escaped from the vagina, part of it like a pale yolk, part like white of egg. On the following day the tenderness was less, the swelling of the external parts had disappeared; the tense elastic swelling behind the vagina had collapsed, and about an inch and a half from the orifice there was a hole in the posterior wall like the opening of an abscess which had burst spontaneously; the mass, though smaller, was still elastic. The uterus was in the same position as on the previous examination. The swelling above pubis appears smaller. The discharge, which was like coagulated peritoneal fluid, continued till the 9th and then ceased. On the 11th there was only a little fulness above Poupart's ligament, but no distinct tumour. The cervix was in the centre of the pelvis; the uterus anteverted, fixed by hard thickening all round it except in front; this thickening could be felt like a mass on the right side, but not distinctly on the left. The pouch of Douglas was empty; a shallow dimple could be felt at the point where the fluid had escaped.

From October 12th to 16th, she complained of severe paroxysmal pain in the lower part of the abdomen on the left side. Temp. 100° to 101°.

On the 18th there was no tenderness anywhere. There was a fulness on the left side running up along Poupart's ligament about three inches in width; this was not tender; it was resonant; it did not reach across the middle line. There was a hard swelling on the right side extending an inch and a half above pubis and an inch and a half to right of middle line; this was also resonant. The posterior wall of the vagina was pushed slightly forwards, and felt soft; the uterus was pushed more towards the pubis than on last examination; it was quite fixed. Posteriorly and latterly the uterus was surrounded by a hard substance. The bulging forward of the posterior wall of the vagina was due to air in the rectum. The Douglas pouch was empty.

November 1st.—The uterus was in the centre of the

DATE
SEPT.
OCTOBER.
27 28 29 30 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 — 31
TEMPERATURE FAHRENHEIT
105°
104°
103°
102°
101°
100°
99°
98°
97°
96°
FROM THIS TIME ON THE TEMPERATURE WENT UP TO 99° THREE TIMES ONLY.

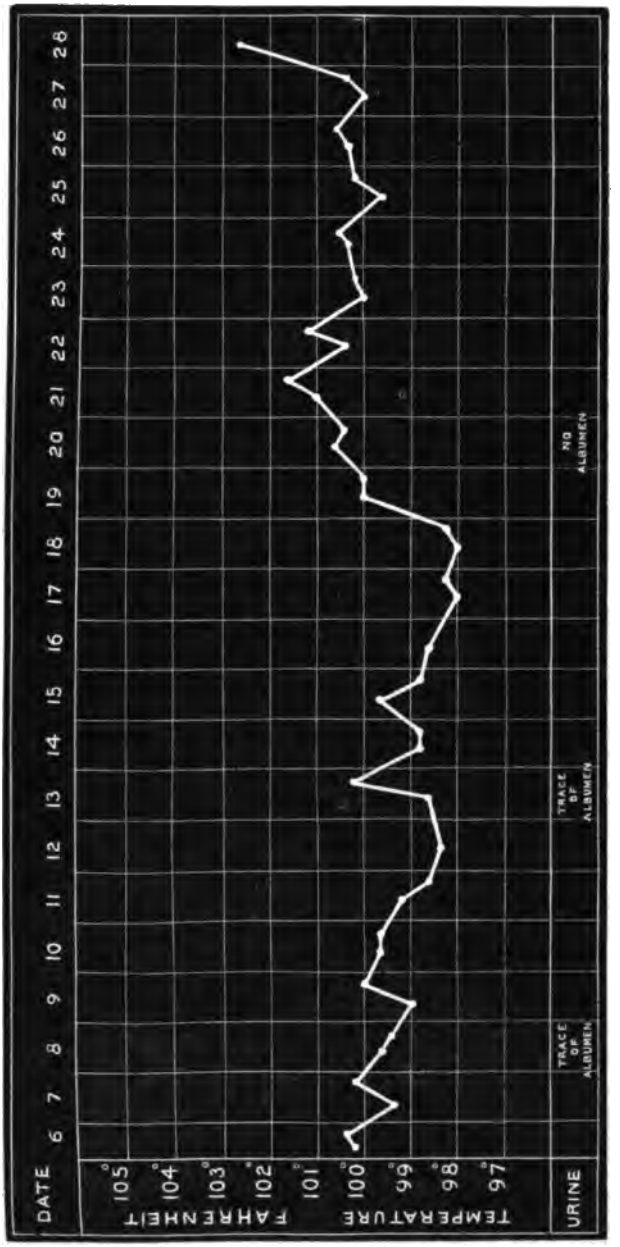
pelvis, more moveable than when last examined. The thickening was much less, but there was a small, smooth, firm mass in the right posterior quarter of the pelvis extending from the uterus to the pelvic wall, and a nodular flattened mass in the left, both fixed. No tenderness. She was discharged.

The urine contained a trace of albumen on one occasion.

She reported herself on November 27th. Menstruation began on the 19th and ceased on the 25th. The flow was rather more than usual; without pain. No swelling could be felt above the pubis. The uterus was placed in the centre of the pelvis with the fundus drawn a little to the right side; it was a little large, moveable. The roof of the vagina was everywhere soft, but on pushing the finger high up and to the right posteriorly an ill-defined hardness was felt which appeared to be tender.

CASE 3. *Serous perimetritis after abortion; tapping; death; no autopsy.*—E. S—, æt. 26, married, was admitted into University College Hospital on November 6th, 1883. She said that about three months before she helped to carry a heavy box. She felt nothing wrong that day, but the following morning she awoke in a profuse perspiration and feeling very faint. An hour or two afterwards she had a miscarriage (said to have been at six weeks), after which she had continuous floodings for seven weeks. The discharge of blood continued till November 4th, two days before admission, when it began to diminish. About a month ago she was seized with severe pain across the lower part of the abdomen and back. At the onset of the pain she shivered and suffered from difficulty in micturition and defæcation. The pain across the abdomen has diminished somewhat and has assumed a bearing-down character.

She has had three children; the last was born two years ago; since that time the periods have been regular until six weeks before her miscarriage.


DATE
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
FAHRENHEIT
105° 104° 103° 102° 101° 100° 99° 98° 97°
TEMPERATURE
URINE
TRACE OF ALBUMEN
TRACE OF ALBUMEN
NO ALBUMEN

On admission her state was as follows:—She was well nourished. In the lower part of the abdomen, rising up from the pelvis and reaching half way to the umbilicus, was a smooth, elastic, moderately firm, fixed swelling. It was tender, but could be fairly well defined.

The cervix was pushed forwards close to the pubis and was on a level with the top of the pubic arch. The finger could be passed between it and the pubis. The cervix had been lacerated through to the insertion of the vagina on both sides. Behind the uterus was a large, smooth, round swelling; it was not tender; the upper part of it could not be distinctly made out by bimanual examination. It extended more on the right than the left side, and its upper border on the right was found to be on a level with the anterior superior iliac spine. The swelling above the pubis in middle line was found to be the uterus; it was slightly moveable.

She afterwards complained of severe pain in the lower part of the abdomen and back. Two days afterwards the swelling was found to have increased in size, and to reach on the left to within a finger's breadth of the anterior superior iliac spine; in the middle line to the level of the anterior superior iliac spine; and on the right side to a line drawn perpendicularly to the centre of Poupart's ligament. The fundus of the uterus could be felt distinctly two and a half inches above the pubis. The swelling in the vagina was about the same size as at the previous examination, but it was distinctly fluctuating. Four days after this the swelling had extended on the left to about an inch above the level of the anterior superior iliac spine. Its upper border was formed by a line drawn from this point to the right anterior iliac spine.

The swelling in the vagina was larger, the uterus pushed nearer the pubis. The right and most dependent part was softer than the rest and evidently contained fluid. It was punctured with an aspirator needle and two and a half ounces of slightly blood-stained serum withdrawn. This contained a few cells like pus-cells, blood-corpuscles,

and *débris*. The patient insisted on going home on the next day. She died four days after leaving. No autopsy.

The urine was tested on November 8th, 13th, and 20th, and contained a trace of albumen on the two first days.

The disease as illustrated by the three preceding cases appears to be rare, perhaps, however, not quite so rare as is generally believed; for I cannot doubt that such cases are, sometimes if not often, mistaken for cases of hæmatocele. The first and third of my cases would have passed very well as cases of hæmatocele.

The cases of serous perimetritis placed on record are certainly few. Matthews Duncan has recorded two cases in his work on para- and perimetritis, and quotes two others, one by Forget, of encysted peritonitis with cancer of the body of the uterus. Seven years previously it was thought to be ovarian dropsy, and was tapped four times under that belief. The evidence in this case does not appear conclusive as to the nature of the disease; it may have been a case of perimetritis, or it may have been one of encysted peritonitis. Duncan relates two other cases in his 'Diseases of Women.' In a footnote in his last edition of his work on the 'Diseases of Women' Graily Hewitt refers to the first case related in this paper, and it is through his kindness that I am now able to publish it.

Rigors were present in two of the cases and absent in one; vomiting was present in one, but not complained of in two. This is the converse of what is often taught.

One case did not appear to be connected with pregnancy, but the history is not sufficiently full to exclude it altogether. Two appear to have come on soon after parturition or abortion, and with symptoms of uterine disease such as hæmorrhage, green fœtid discharge, and pain. The peritonitis seems to have begun in two cases on the right side and in the neighbourhood of the right ovary, for at that point the swelling was most marked in the

earlier stages, and in the second case, which was watched until the patient recovered, it was there it remained longest. It was not distinctly felt in the left side at first; it was only after a relapse that it appeared there.

In Case 3 the growth of the swelling was observed as it extended above the pubis and down towards the vagina. It clearly began in the neighbourhood of the right ovary and extended downwards into the pelvis and towards the left side.

The displacement of the uterus is intimately connected with the course and direction of the inflammation. Effusion into the peritoneum does not necessarily cause displacement of the uterus; displacement occurs only when the fluid becomes encysted. In the three cases the displacement was of the same character, namely, forwards and upwards, so that the uterus was placed immediately under the anterior wall of the abdomen, the cervix being on a level with the top of the pubic arch or higher. Effusion alone could not bring about such a change in the position of the organ; it could push the organ downwards and forwards only. For the production of the upward displacement, the fundus of the uterus must have become adherent to something above it—to intestine, and the brim of the pelvis must have been closed; fluid then poured into the closed cavity thus formed would push downwards the floor of the pelvis and upwards the roof formed by matted intestines and uterus, for these are the only parts of the wall which are yielding. It becomes also equally clear that the fluid must have been poured out partly or wholly after the brim of the pelvis had become closed by adhesions.

The nature of the effusion was shown by Case 1, and this explains some physical signs the cause of which has hitherto been obscure. Matthews Duncan has observed after he had tapped cases of serous peritonitis that a hard thick mass remained occupying the upper part of the pelvis. This thick mass has been attributed to the adhesions between the uterus and the surrounding parts. The

mass left in Case 1, however, was due to nothing of the kind, but to coagulated peritoneal fluid which filled the upper and posterior part of the pelvis. This was adherent to the roof and sides of the cyst, hanging from them in great flakes. The fluid which had not become coagulated had gravitated into the lowest part of Douglas's pouch, and had been removed by the aspirator. The same condition was clearly present in the second case, for the fluid which escaped after the rupture of the cyst contained flakes of coagulated peritoneal fluid; and it seems to me that this explanation holds good of cases in which similar hard masses have been found after tapping. After the fluid had been removed the coagulum maintained the uterus in its displaced position. The tumour formed by the matted intestines was not the cause of the displacement of the uterus. The matted intestines were in the same way as the uterus displaced by the effused serum, and it is not improbable that had the cysts been tapped before the process of coagulation had begun, the uterus and intestines would have fallen into their normal position immediately afterwards.

I have added the temperature charts of the three cases, because I know of no such records. Unfortunately the charts are not complete because the cases had run a part of their course before they came under observation.

Mr. KNOWSLEY THORNTON had seen two cases of this disease, one of which had been cured under tapping and drainage, and the other had died without any local treatment. As there was no post-mortem he could not speak with absolute certainty about the latter. The points of interest appeared to him to be pathological and clinical. What was the starting-point of this violent inflammation which caused such dense adhesions? How did it differ from ordinary cellulitis or ordinary pelvic peritonitis? Was the onset due to escape of fluid from the Fallopian tube? The fact that these cases generally followed delivery or abortion or sudden checking of menstrual flow pointed strongly in this direction. Then one would expect the fluid to be septic and the effused serum to be septic, but it was not so, as seen when it was drawn off, and also by the fact that when it was made septic

by admission of air or infection from tapping instruments the patients almost invariably died of septicæmia, unless a free opening for discharge and washing out were maintained, as in his own case, or unless nature made a fresh and free opening as in Dr. John Williams's non-fatal case. Everyone seeing much of the diseases of women was familiar with cases of perimetritis or of pelvic peritonitis, and of cellulitis, but this serous perimetritis, if not actually a different disease, was so practically. Evidently the material causing the inflammation was of a very irritating kind, hence the dense nature of the confining adhesions. Was the semi-solid material sometimes found in the cavity with the serum a coagulum, or was it formed in this condition from the extreme pressure to which it was subjected during effusion? It was the fact of effusion into a cavity with such dense walls that gave rise to the great pain and constitutional disturbance accompanying the disease. Did it also alter the nature of the effusion? The important practical point appeared to be that when it was really necessary to tap one of these cases the aspirator should not be used, but a trocar which would provide for free escape of the fluid afterwards and washing out of the cavity. Nothing answered so well for this purpose as a Cock's trocar and cannula, and a Wells's retaining spring for the latter.

Dr. Gervis thought Dr. Williams's paper one of extreme interest. He could not, however, but think that cases similar in character, though perhaps of less severity, were not so very uncommon. As regards Dr. Williams's view that the pushing upwards and forwards of the uterus by retro-uterine hæmatocele occurred only after the fluid was encysted and through some adhesion of the fundus, it was not sustained by his (Dr. Gervis's) experience. He had seen many cases in which almost immediately after the effusion, and before by any possibility it could have become encysted, the uterus had assumed its characteristic position.

Mr. Alban Doran observed that Dr. Williams appeared to agree with him in the theory that perimetritis was generally the result of the transmission of morbid fluids and inflammatory processes from the uterine cavity to the pelvic peritoneum by way of the tubes. It was most significant that in one of Dr. Matthews Duncan's own cases of serous perimetritis described in that obstetrician's 'Practical Treatise on Perimetritis and Parametritis,' the sound could be easily passed through the left Fallopian tube into the peritoneal cavity. Encysted perimetritis was probably rare because it was the result of a combination of pathological accidents. Firstly, one tube must remain patent, since if both be sealed up the peritoneum cannot receive any irritating fluid. Secondly, the peritoneal inflammation must be just of that kind where serous fluid is thrown out, and lastly, the serum must be pent up by adhesions binding neighbouring

structures in a particular manner. All perimetritic inflammations may, in rare instances, be of parametritic origin. Thus, Mr. Doran once observed, in making a necropsy on a woman who had died a few days after labour with thrombosis of the ovarian veins, how the pelvic connective tissue, hypertrophied (as Dr. Berry Hart has shown to be always the case) by pregnancy, was infiltrated with serum. As some of this tissue was in contact with the pelvic peritoneum, the latter was in imminent danger of becoming inflamed. Still, for many reasons, perimetritis is more likely to arise through infection by way of the tubes than by way of the pelvic connective tissue.

Dr. GRAILY HEWITT pointed out the analogy between the hardening of effusion into the retro-uterine pouch (described as serous perimetritis) and the hardening observed in effusions in the broad ligaments (pelvic cellulitis). The only difference seemed to be the locality of the effusion. He considered the diagnosis between cases such as those described by Dr. Williams from cases of pelvic hæmatocele very difficult.

Dr. GODSON was of opinion that serous perimetritis was less rare than the author had stated, and that in diagnosing it from pelvic hæmatocele there was frequent difficulty. It was a remarkable fact that when Dr. Greenhalgh was Physician-Accoucheur to St. Bartholomew's Hospital his ward almost always contained several cases of pelvic hæmatocele, while since Dr. Matthews Duncan had succeeded him cases of perimetritis abounded, and pelvic hæmatocele was rare. Dr. Godson having been assistant to both knew well that many of these cases, called by the one pelvic hæmatocele and by the other perimetritis, were identical in their characters. In the majority, with rest and patience, the swellings, though often large, disappeared completely, and as they were not tapped it was impossible to confirm the diagnosis; it was probable that had they been tapped, this opportunity might also have been occasionally arrived at by a subsequent post-mortem examination.

Dr. MATTHEWS DUNCAN esteemed highly this contribution to pathology, and valued especially the post-mortem of one of Dr. Williams's cases. In Dr. Duncan's cases the fluid always ran off as in a perimetric abscess, and he never suspected that remaining solid hardness might in part be caused, as Dr. Williams thought, by solid or coagulated serum. He had seen the serum get solid or jellied after it was drawn off, but he had never contemplated this change taking place within the cavity containing the fluid. On this point he desiderated full assurance.

Dr. CLEVELAND thought the use of the thermometer had not been sufficiently dwelt upon in the differential diagnosis between serous perimetritis and hæmatocele.

Mr. GRIFFITH remarked that the great difference of opinion amongst the various speakers might be accounted for by the

want of a precise definition of the subject under discussion. Some who thought the disease rare were limiting the term serous perimetritis to cases in which the effusion was large; he believed that serous perimetritis was the commonest form of perimetritis, and should be compared with the common form of pleurisy, namely, pleurisy with effusion of serum. We should expect this from our knowledge of inflammations of other serous membranes, and he believed it was the case from the physical signs usually present, especially the displacement of the uterus forwards, which could not be accounted for by the swelling of the peritoneum alone or the effusion of solid flaky lymph, and its rapid disappearance by resolution pointed to its being serum. The possibility of the serous effusion escaping into the rectum, vagina, or bladder, which the specimen he had shown demonstrated, would offer a ready explanation of the almost sudden disappearance of symptoms, which occasionally occurred in cases in which pus was not found in the urine or motions.

Dr. GALABIN said that he had met with a fair number of cases in which encysted serous perimetritis had been diagnosed, and in which the diagnosis appeared to be confirmed in the gradual disappearance of the fluctuating swelling and the recovery of the patient. In one instance the resemblance to an ovarian cyst had been very close. The fluctuating swelling was felt in the posterior vaginal cul-de-sac, and formed an apparent tumour reaching above the umbilicus. A diagnosis of probable encysted serous perimetritis was made because the affection had commenced with acute inflammatory symptoms. Eventually the swelling gradually and completely disappeared. In only one instance had he thought it advisable to tap a serous perimetritis, and this was only done under an error in diagnosis. He thought such a course generally unadvisable. The case illustrated what acute inflammatory symptoms are sometimes produced in such cases. A fluctuating swelling was felt in the pouch of Douglas, and the rigors and high temperature led to the belief that this was an abscess. It was tapped with an aspirator, with all the antiseptic precautions which could be secured under the circumstances, but only clear serum was drawn off. After a few days the patient became worse, and appeared to be suffering from septic symptoms, the swelling having filled again. A free incision was now made, a large drainage-tube kept in, and the cavity washed out frequently with a weak solution of iodine. Eventually the patient recovered after a serious illness.

Dr. CHAMPNEYS had noticed the flakes of lymph described by Dr. Williams in fluid recently drawn from a case of serous perimetritis under his care. He had lately had a case in St. George's Hospital in which a pouch of clear serum existed side by side with an ordinary pelvic abscess. As regards the surgical treatment, it must be remembered that the walls of the cyst were

dense and unyielding, and would not readily collapse; in this lay one of the dangers. If such a collection were opened, antiseptic treatment should consist of careful antiseptic cleansing of the vagina and of the instruments, and in addition he believed that it was well to leave an iodoform pessary, which would melt slowly, in the vagina, to take care of any germs which might attempt to gain an entrance. He believed that the differential diagnosis without tapping was impossible more often than not. He would remind Mr. Griffith that a very small enlargement of pelvic organ—such as an ovary—was sufficient to displace the floating uterus, and that displacement was not an absolute evidence of effusion.

In reply Dr. WILLIAMS said that the first case was bettered by tapping; that she died from severe diarrhœa for which there was ample cause other than sepsis, and the contents of the sac were quite sweet and aseptic after death. The little serum at the bottom of the sac was clear and sweet. As to the rarity of the disease Dr. Williams was surprised to hear from several speakers that they had seen several such cases. There were only about half a dozen cases on record, and the majority of the systematic writers on the diseases of women said little or nothing about it. The three cases recorded in the paper were the only three Dr. Williams had seen recognised. Mr. Doran's ingenious explanation of the extension of inflammation along the Fallopian tube to the peritoneum in some cases and not in others was deserving of attention and study. Dr. Williams thought it probably a correct account of what took place. Dr. Matthews Duncan asked if the solid serum was the result of post-mortem change. Dr. Williams thought it was not, because the solid mass was discovered by Dr. Hewitt and himself during life above the layer of blood in the most dependent part of the sac; flakes of it were passed in the second case, and in the three cases a similar hard mass was discovered at the top of the sac during life, and Dr. Matthews Duncan had found the same physical signs after tapping—signs which the presence of the coagulated fluid freely explain.

NOTES OF A SPECIMEN OF THE PSEUDO-OSTEO-MALACIC PELVIS, OF NAEGELE.

By Walter S. A. Griffith, M.B., F.R.C.S.

This interesting example of a rare deformity was bought in Paris by Professor Humphry, who kindly gave Dr. Griffith permission to examine it and bring it before the notice of this Society. It has been placed by Professor Humphry in the Pathological Museum at Cambridge.

It is obviously a rachitic pelvis, but has some of the principal deformities characteristic of mollities; namely, a much-curved sacrum (the curve beginning at the middle of the second bone) instead of the usual straight sacrum of rickets; much-curved iliac fossæ instead of the flat everted fossæ; a triangular brim in place of the flattened brim; and the posterior portions of the iliac bones are moulded round the sacrum as is invariably the case in mollities.

On the other hand, the pubis is not beaked, nor is the pubic arch narrowed, nor the acetabula much bent inwards as in mollities and other specimens of this type.

The deeply-sunk sacrum is common to both mollities and the more severe deformed rickety pelves. The bones themselves are entirely free from any of the appearances of mollities, being hard, smooth-surfaced, and heavy, and the posterior iliac spines are massive; moreover, the pelvis as a whole is small, as is invariably the case in well-marked rickets; but it is certainly less massive than rachitic pelves usually are, and the centres of the iliac bones are thin and translucent.

It appears less difficult to account for the shape this

pelvis has acquired than for that which is usually produced by rickets. We have simply to imagine that the disease attacked the patient at a later period of childhood than is usual, at least after the child was accustomed to walk, and possibly that the disease was more severe; and the almost entire freedom from deformity of the pubis and its rami indicate one of two things, either, as is most probable, a comparative freedom of this part from disease, or that the tendency to crushing together of the sides of the pubes was overcome by the usual force which in rickets succeeds in forcing them further apart; if, however, the latter had been the case there should have been some evidence of it in some kind of deformity of the narrow rami of the pubis and ischium.

The best descriptions of this form of pelvis are by Litzmann and Spiegelberg; from their writings, with Dr. Hurry's assistance in translating, the greater part of the following information has been obtained.

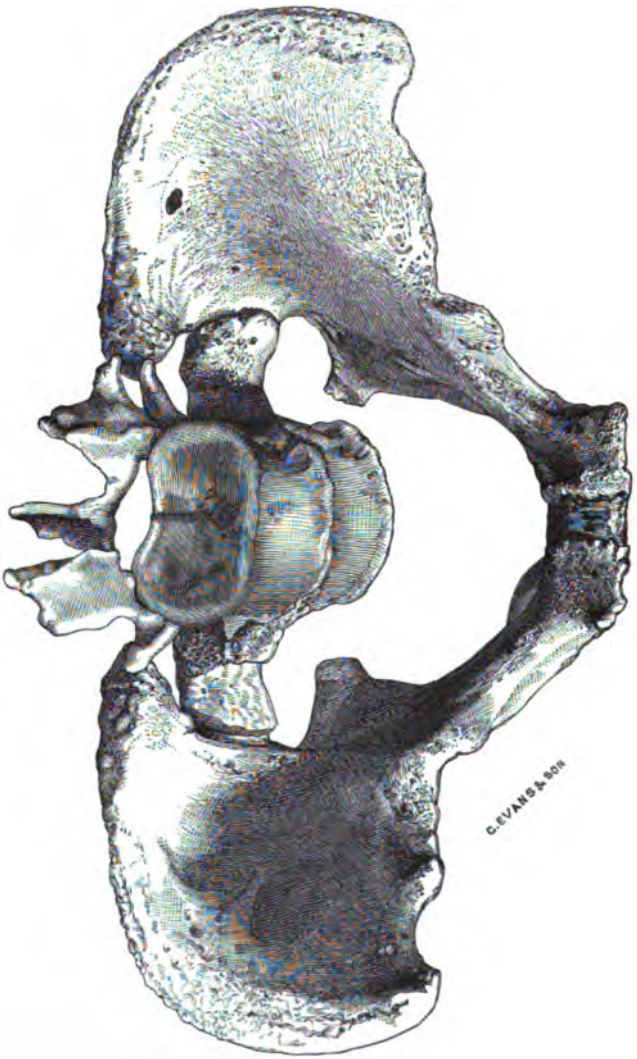
The first record is by Smellie, who gives a drawing in Table III of his 'Anatomical Illustrations,' published in 1754.

Dr. John Burns, of Glasgow, in his 'Lectures on Midwifery,' published in 1809, also alludes to it, but the first accurate description is by Naegele, who in 1834 suggested the name of 'Pseudo-Osteomalacia,' and in a later work, 'Das Schrägverengte Becken,' gave drawings and some account of the specimens then known.

Michaelis, of Kiel, whose name has become associated with this form of pelvis, in his work 'Das Enge Becken,' p. 165, gives a series of references and suggests that the name 'Pseudo-Osteomalacia' given to it by Naegele be generally adopted.

Litzmann in 'Die Formen des Becken,' 1861, p. 92, describes the chief characters of this deformity, the bending in of the sides of the pelvis and the ischial tuberosities, the beaking of the pubes and the curving of the sacrum, and makes the following remarks:

"The bones of the pelvis may be highly atrophied, of


C.EVANS & SON

striking smallness and thinness, but they are throughout hard and solid. The surface of the bones is never found, as in osteomalacia, to be rough and porous or raised in the form of blisters.

"The parts forming the brim of the pelvis are chiefly

shortened posteriorly as in mollities, whilst in flattened rachitic pelves it is chiefly the anterior portion that is shortened."

Spiegelberg, in the 'Geburtshulfe,' 1878, p. 490, describes this as one of two forms of the "crumpled" rachitic pelvis.

In one variety a pelvis primarily rachitic is attacked with mollities, and the characteristic deformities of mollities is the result. He refers to an example of this recorded by Pagenstecker in the 'Monat. für Geburt.,' vol. iv, p. 1, 1854.

In the second variety, to which this one belongs, the pelvis is purely rachitic, but in consequence of considerable softening and the pressure to which it is exposed, it assumes the form proper to osteomalacia; such softening occurs in extreme and long-standing cases of rickets in which only osteoid layers are added to the already ossified bones, while underneath these osteoid layers a reabsorption of the bone earth takes place.

I am indebted to Mr. Reece, of St. Bartholomew's Hospital, for the photographs, which show especially the triangular brim of the pelvis and the curved sacrum with the ilia moulded to it.

TABLE *of measurements of a specimen of pseudo-osteomalacic pelvis, given in inches and centimetres, compared with the average measurements given by Dr. Garson in the 'Transactions of the International Medical Congress,'* 1881, vol. i, p. 185.

	Centimetres.	Inches.	Garson's average. Inches.
Sacrum: length of anterior surface	8·25	3¼	4
„ vertical, promontory to apex	5·2	2	
„ breadth	10·75	4¼	4¼
Anterior superior iliac spines	24·25	9½	9½
Iliac crests	25·5	10	10
Posterior superior iliac spines:			
Internal measurement	6·5	2½	
External „	9·	3½	3½
Height of pelvis	16·5	6½	8
Breadth of ilium	14·	5½	6¼
Acetabula to symphysis	10·75	4¼	4¼
„ to posterior superior iliac spines	9·5	3¾	
Pubo-ischiatic depth	9·	3½	3½
Brim: Conjugate (true)	7·	2¾	4¼
Brim: Transverse	10·75	4¼	5¼
Brim: Obliques, right and left	10·25	4	
Outlet: Antero-posterior, to tip of sacrum	9·75	3¾	4½
Outlet: „ to tip of coccyx	7·75	3	
Outlet: Transverse	8·25	3¼	
Pubic angle	...	75° about	76°

JULY 1st, 1885.

J. B. Potter, M.D., President, in the Chair.

Present—38 Fellows and 6 visitors.

Books were presented by Dr. J. H. Bennet, the Middlesex Hospital Staff, the Royal Medical and Chirurgical Society, and the American Gynecological Society.

Charles Stormont Murray, L.R.C.S., and L.M. Ed., was admitted a Fellow of the Society.

William Charles Everley Taylor, M.R.C.P. Ed., was elect a Fellow.

The following gentlemen were proposed for election :— Daniel Herbert Bastable, L.K.Q.C.P.; J. Brice Bunny, L.R.C.P. Ed. (Newbury); and W. Radford Dakin, M.D., Lond.

RUPTURE OF THE UTERUS.

Dr. Harvey (Calcutta) exhibited a specimen, of which he gave the following history :

Byragi, a well-nourished Hindu, æt. 20, eight months pregnant with her first child, was admitted into the Eden Hospital, Calcutta, at 9 a.m. on the 13th December, 1884, complaining of slight abdominal pain and discharge. The os uteri did not admit the tip of the finger and the pre-

senting part could not be felt by the native assistant who examined her. He noticed nothing unusual except slight tenderness on pressure. There was no vomiting, the temperature and pulse were normal, and the appetite good. The pains were taken to be ordinary false pains, and she was told to keep quiet, and ordered an opium enema every six hours. The discharge amounted to about an ounce of blood in twenty-four hours, and she was carefully watched in consequence. She remained in this state for sixty hours, complaining of slight pain and tenderness but being in other respects quite well. At 9 p.m. on the 15th—sixty hours after admission—the os being then open to admit tip of finger, she turned round in bed, gave a scream, became rapidly collapsed, and in spite of free stimulation died in five minutes. Dr. J. Clarke, the Resident Surgeon, to whom I am indebted for these notes, saw her at once and, diagnosing rupture of the uterus, removed a living male child (which, however, did not survive) by laparotomy within two minutes of the mother's death. Both child and placenta were in the abdominal cavity, but on attempting to remove the latter it was found firmly attached to a portion of small intestine, while the uterus itself was bound by adhesions to the large gut on its left side, both sets of adhesions being firm and apparently of some standing.

On examination post mortem it was found that, with the exception of the above-mentioned adhesions, there was no evidence of either recent or old standing peritonitis. A rent three and three quarter inches in length was found in the uterus, beginning anteriorly a quarter inch below the fundus, crossing the fundus, and extending three inches along the posterior wall towards the left border. On each side of the tear there was evidence of cicatrization, and bands of strong firm adhesions extended from each side of the rupture to the ascending colon, to which they were firmly attached for six inches. The margin of the placenta was found attached at intervals, in some places very firmly, to a portion of small intestine which measured

twelve inches. These attachments have been separated, but portions of placenta can still be seen adherent to the bowel. The abdomen was full of recent blood.

It is evident from the history and post-mortem appearances that the sudden death was due to shock and hæmorrhage caused by the opening up of the uterine tear, and escape of the child and placenta; but it also seems to be clear that the original rupture was antecedent to this, and that the sequence of events was as follows:—Some time, (and judging by the strength of the adhesions probably a considerable time), before admission, the uterine wall gave way over the site of the placenta. This bulged through the opening, filled it up, prevented hæmorrhage, and allowed nature to try to remedy the michief, as evidenced by the adhesions, the attempt at cicatrization, and the general good case of the patient on admission. The repair was, however, necessarily incomplete, and on the approach of labour the uterine contractions, though feeble, were sufficiently strong to cause the dilapidated tissues to give way, with disastrous result. There is nothing to account for the original rupture. The patient volunteered no history, and as the case seemed to be an ordinary one no special inquiry was made. There was no obstruction in the pelvis, and labour had barely begun; and Dr. Waddell, the Professor of Pathology, could find no evidence of fatty degeneration, or other disease of the uterine wall.

Dr. CHAMPNEYS remarked that the history of the case was so unlike that of ordinary spontaneous rupture, and the tear was so unusual in position, that a careful search should be made for malformation of the uterus.

A Committee, consisting of Dr. Champneys, Mr. Doran, and Dr. Harvey was appointed to examine and report upon the specimen.

MALIGNANT DERMOID OVARIAN CYST.

By Mr. J. Knowsley Thornton.

N. F—, single, æt. 16, patient of Dr. Marshall, of Barnes, was at the suggestion of Sir Joseph Lister placed under my care at the Samaritan Hospital, on June 16th.

She had never menstruated, had had the usual children's diseases, but had been a bright, healthy child, and was apparently quite well till three months back, when she began to suffer from pains in the abdomen and also noticed that she was getting large.

The abdomen was greatly distended by a mobile, hardish tumour of very irregular outline, fluctuating at some parts and of bony hardness at others. Rectal examination showed that the uterus was small, and that the tumour sprang from the left ovary. I removed it by ovariotomy on June 29th, and also the right ovary, which was a mere bag of small cysts (? aborted follicles). When the abdomen was opened the tumour was seen to have a deep purple colour like the spleen, this being due to its extreme vascularity. Concluding that it was malignant, both from its appearance and extremely rapid growth, I prolonged my incision sufficiently to remove it whole. I failed in this, owing to a portion of the cyst wall having died and become softened; a tear occurred along the margin of this patch, and there was a small escape of cyst contents over the omentum and edges of the incision. There was a good deal of free fluid in the peritoneum. The tumour with its fluid contents weighed 9½ lb. and proved to be a sarcomatous dermoid. The lining membrane of the main cyst showed side by side curious processes of destruction and new growth, the former due to plugging of vessels, and the latter solid, sarcomatous outgrowths,

chiefly pediculate. These outgrowths contained solid sarcoma, small cysts of all kinds, skin, hair, cartilage, bone and teeth all growing together in the strangest confusion.

These sarcomatous, malignant, dermoid, ovarian tumours are very rare, and so far as I know, have at present only been described by myself in the 'Medical Times and Gazette,' November 5th, 1881. The curious feature about them is that cysts, solid growth (sarcoma), and dermoid structures are all mingled together in such confusion, neighbouring cells apparently developing totally different structures.

The patient made a rapid and uninterrupted recovery, but I shall watch her future with anxiety, my small experience of these cases so far pointing to their active malignancy and rapidly fatal recurrence.

ATROPHY OF CHORION.

Dr. Herman exhibited an early abortion which had been given to him by Mr. Appleford. Unfortunately he had not been able to obtain any history of the course of pregnancy. The abortion, from the size of the expelled product, he judged to have taken place towards the end of the second month, the mass expelled being about the size of a Tangerine orange. Externally the decidua was rather thin, but presented no striking peculiarity. The sac of the fœtal membranes was entire. It measured about an inch and a quarter in diameter. Instead of being all over thickly covered with villi, as it should have been, patches were seen quite smooth and destitute of villi; over other parts there were small, sparsely scattered villi; and in places only were clumps of villi of natural size. These clumps were at different parts of the bag of membranes, not aggregated at one place, as if the placenta were being

formed. He could offer no opinion as to whether this atrophy of chorion were secondary to the death of the fœtus or had been primary, and the cause of abortion.

Dr. PRIESTLEY said that the question was, Did the chorion by its atrophy cause the death of the embryo, or did the embryo die first and produce this atrophy as the secondary result? There was reason to believe that when the embryo perished from any cause, the growth of the villi of the chorion was arrested, although the decidual membranes, deriving their nourishment from the uterine walls, might go on growing. In this way there was a great disparity in the development of the fœtal envelopes. The difficulty in determining the order of events was very great.

NOTES OF A VISIT TO SOME OF THE LYING-IN HOSPITALS IN THE NORTH OF EUROPE; AND PARTICULARLY ON THE ADVANTAGES OF THE ANTISEPTIC SYSTEM IN OBSTETRIC PRACTICE.

By W. O. Priestley, M.D., LL.D.,
LATE PROFESSOR OF OBSTETRIC MEDICINE, KING'S COLLEGE.

In paying a visit during last autumn vacation to some of the towns and cities in the north of Europe, I was much struck with the excellent management of the lying-in hospitals, and more particularly with the great pains taken to exclude the germs of disease, which, however introduced, become the starting-points of puerperal fever, or some of the other forms of blood-poisoning.

At Copenhagen, the improvement in the salubrity of the Maternity Hospital has of late years gone on by a gradual process of development, which was well described by Professor Stadfelt in a communication read before the International Medical Congress at Brussels in 1876. To Professor Stadfelt is largely due the initiative of a new organization, which, if not perfect, is a great advance in the administration of lying-in hospitals. This new organization began in 1870, and has had a remarkable effect in reducing the rate of mortality from puerperal fever and septicæmia among the poor women delivered in the institution. From published tables it appears that the mortality from puerperal fever in the Copenhagen Maternity during the fifteen years from 1850 to 1864 was as high as 1 in 24 of all the women delivered—the average mortality from the same causes being about 1 in 123 in the town of Copenhagen itself, exclusive of the Maternity. Previous

to this, the mortality had been even higher, for, from the statistics of Dr. C. J. Kayer, the deaths between 1822 and 1843, with 21,149 deliveries, had actually amounted as high as 1 in 19—being only slightly lower than the mortality in the Nightingale Charity at King's College Hospital, which compelled me to close the ward.

In 1865 the outcry against maternity hospitals had reached even to Copenhagen, and the Lying-in Hospital was closed for two months for thorough cleaning and disinfection. It then came under the direction of Professor Stadfelt, who believing, as he expresses it, that "the hygiene of a Maternity depends less upon its construction and upon its age than upon the hygienic principles upon which it is directed, and on the perseverance with which these principles are carried out in the daily service," began a new epoch.

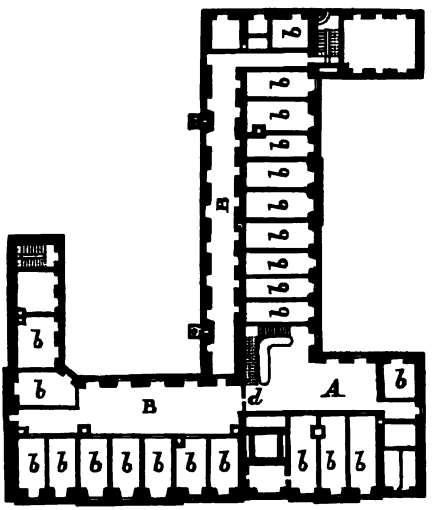
Dating from 1865 to 1874, the mortality from puerperal fever was reduced to 1 in 51 of the deliveries. During the last four of these years, viz. from 1870 to 1874, the mortality was reduced as low as 1 in 87, a progressive improvement which kept pace with the stricter antiseptic precautions enforced in the administration.

The present Lying-in Hospital in Copenhagen consists of two stories, built in the form of two letters L, the head or capital of the one letter being united near the middle of the shaft of the other. By this arrangement there are two corridors on the same floor, united at right angles, and which can be securely shut off one from the other. These corridors have the outer wall and windows on the one side, and on the other the doors opening into the patients' rooms. These patients' rooms are sufficiently capacious, but contain only one bed. Each has its own large window opening to the outer air opposite to the door of entrance. The floors are bare and polished, and the walls so arranged as to be easily and thoroughly cleaned. The whole interior is warmed with hot-water pipes, and the ventilation is carefully carried out on the principle of "the exsufflation of air." The closets are in recesses built

from the outer wall of the corridors, and their drainage is collected in moveable receptacles which are frequently and systematically emptied. It may be mentioned that there is no regular drainage for water-closets in Copenhagen; it is indeed not permitted, and all excreta and waste are taken away in moveable receptacles.

In addition to forty-four separate chambers on the two stories, there are rooms near for the inspectresses, kitchens,

PLAN OF LYING-IN HOSPITAL IN COPENHAGEN.



A, B. Corridors. *b*. Chambers. *d*. Locked doors, shutting off delivery rooms from convalescent chambers. (From Prof. Stadfelt's paper.)

and stores for linen. Three separate delivery rooms are set apart on each floor, and these are shut off entirely from the convalescent chambers. The several sections, indeed, are so effectually divided by well-fitting glass doors, which are kept closed and locked, that they can be isolated, and practically form so many separate buildings.

The number of rooms gives the opportunity of placing each patient delivered in a separate apartment, and by

way of increasing the salubrity of these single chambers a system of alternation is resorted to, and each room in turn after being used is closed and thoroughly cleansed before a fresh patient is admitted into it. As this system of alternation is equivalent to lessening the accommodation by one half, a supplementary service has been organised outside the hospital, and patients who cannot be received into the Maternity are billeted either in the houses of appointed midwives or in a lodging at the choice of the patient; the hospital authorities contributing an allowance of money for the purpose. This supplementary service or "system succursales," as it is called, has been found not to be freer from defects than the hospital itself, for a number of children were lost from *trismus nascentium* and *atelectasis* of the lungs, and, inasmuch as the lodgings could not be subjected to the same rigorous supervision in regard to cleanliness as the hospital wards, they soon became infected with puerperal contagion.

Only such cases as are likely to be free from complication are permitted to be located outside the hospital, and as some such arrangement is absolutely necessary to keep the Maternity itself from being overcrowded, every precaution possible is taken to control those who receive parturient women and to insist on the most perfect hygienic conditions practicable under the circumstances. The regulations apply not only to the furniture and utensils of the lying-in room but also to the "personnel" of the women engaged in the service.

The method adopted within the Maternity walls necessitates the employment of a considerable number of women nurses or pupil-midwives, and there seems to be no lack of these offering themselves. From thirty to forty of these women are arranged in three groups. A third are appointed to the delivery rooms, a third to the convalescent chambers, and the remainder are permitted to be off duty for a few days. It is a rule strictly enforced that no pupil-midwife shall go directly back from the convalescent wards to the lying-in department without

a bath, change of clothing, and a sufficient interval being allowed for purification. If a nurse or midwife has attended a patient who was ill, she is, after her nursing is over, fumigated with sulphurous acid vapour. For this fumigation a room is set apart in which the vapour can be generated, and the whole of the body and clothing of the nurse are fumigated except the head. The head is protected by an elastic india-rubber tube which surrounds the neck at one end and admits air at the other from a corresponding aperture in the window. This is regarded as one of the most effectual methods of personal disinfection, both for nurses and medical men. I learned, however, that the expedient is not very popular among the nurses, as, however carefully arranged, it is scarcely possible to prevent the sulphur fumes getting access to the breathing passages, and a quarter of an hour's detention in this *durance vile* is not regarded as an agreeable experience.

Sulphurous acid vapour is employed also to disinfect the chambers as well as the bed and furniture after the discharge of each patient from the hospital.

The management of the lying-in rooms and convalescent chambers is carried on with an amount of antiseptic precautions which at first may seem very irksome, but by use it becomes part of an easy method.

No exploration or examination of a patient is made without the hands being immersed in carbolic acid solution or some other disinfecting agent before and after. No operation is performed without the hands and arms being plunged in carbolic acid and water. All syringes, catheters, and tubes lie habitually immersed in carbolic acid and water or in a solution of corrosive sublimate. Sponges are abandoned and their place is taken by tow or flax, which is used for bathing the external parts of patients, and then destroyed afterwards. Elastic catheters are banished and metallic ones substituted. Twice a day the vagina of the puerperal patient is injected with carbolic acid and water, and if there is any tear in the perineum

or elsewhere it is dressed with an ointment of carbolic acid or salicylic acid.

The beds are made of the cheapest material, viz. canvas or sacking filled with chopped straw, so that they may be destroyed after use. Generally it may be stated that all the beds and their coverings are supplied to each patient either new or thoroughly purified and disinfected after previous use. Each bed is furnished with a separate series of basins, syringes, and metallic catheters, all bearing in plain characters the number of the room or bed to which they belong, so that there may be no mixing of instruments, and it is forbidden to remove any article from one apartment to another, or to use the same instrument for two patients until thoroughly disinfected. Moreover, every patient who is not going on well has a particular form of syringe, so that no confusion may arise. The placentæ and the flax or tow used in bathing the patients are forthwith thrown into a tub filled with solution of chloride of lime and then subsequently burned in the furnace used for heating.

When a patient shows indications of illness, she is either removed or isolated at once from the other patients, and the admission of other women is for the moment suspended in that section of the hospital until all trace of infection is destroyed.

When a patient dies the body is removed as speedily as possible from the hospital precincts, and the medical officers are prohibited from taking part in the post-mortem examinations. Prof. Stadfelt contends that, with the precautions adopted, neither the teaching of pupils nor the frequent examination of patients is deleterious in its effects to the inmates of the hospital.

To ensure immunity from bad results it is, however, absolutely necessary to enforce rigidly the precautions concerning disinfection on all alike, and to punish rigorously any infraction of the rules laid down. With this thoroughly understood, the presence of a number of pupils or pupil-midwives becomes an obvious advantage, as it permits

the alternation of service previously spoken of, and enables each patient to be thoroughly attended to.

Two or three conditions seem essential to the effective working of such a careful antiseptic system as that just described. There must be a sufficiency of space in the maternity hospital, and there must be a sufficiency of funds to supply the requisite appliances, which need not nevertheless be very expensive. It is besides, obviously a great advantage to a maternity that the chief medical officer should at the same time be the Director, and should reside, as he does at Copenhagen and elsewhere on the Continent, within the precincts of the hospital. He is there free from interference by committees of management, and he is thus able to direct every detail and to cope at once with any difficulty, ordinary or exceptional. At the same time the chief is not debarred by his position from consulting private practice, and he can receive private patients in his own consulting rooms like other physicians.

To ensure good management it seems requisite that no one maternity hospital should be so large that it cannot be kept well in hand by the Director-in-Chief. The minutest details are so important in a prophylactic point of view, and consequently in the interests of humanity, that in their results they seem almost to outweigh the necessity for skill in operations and general medical treatment.

In reviewing the management of the Maternity at Copenhagen a diminution of mortality from puerperal fever to 1 in 87 does not seem a very great result to have attained. The average mortality from this cause, as previously stated, in the town of Copenhagen, apart from the Maternity, and taken from the statistics of twenty-five years ending in 1874, was 1 in 123. Even this mortality has been greatly lessened by the use of antiseptics among the midwives since 1874. In making a comparison, however, of these figures, it is but just to recollect that in some points the Maternity stands in a very different posi-

tion from the rest of the town to which it belongs. In the first place there is a much larger proportion of primiparous patients delivered in the hospital than outside, the figures standing at 109 primiparæ to 100 multiparæ. In the general population the proportion is 30 of the former to 101 of the latter. It is well known that the mortality from all causes is larger in first than in subsequent labours, more especially from the febrile conditions of the puerperal state. These dangers are always exaggerated in unmarried women, many of whom seek shelter in lying-in hospitals. This appears more distinctly from the published data, which show that the deaths of primiparæ were at the rate of 1·5 per cent., while they were only 0·8 per cent. for multiparæ.

In the second place the proportion of instrumental and morbid labours generally is larger in a maternity than in the area outside it, for such cases naturally seek admission to a public institution where the medical officers have a reputation for special skill.

The mortality of the Copenhagen Maternity from 1870 to 1874 shows a marked improvement on the well-known statistics of Lefort, who placed the mortality of maternities from puerperal fever at 1 in 22 as compared with the mortality of 1 in 212 for those delivered outside the maternities. Moreover, it should be noted, that this successful warfare against puerperal death in the Copenhagen Maternity was but the beginning of the antiseptic period, and that good results have gone on growing. From some carefully collated statistics on puerperal mortality by Dr. Ingerslev, presented to the International Medical Congress in 1884, it appears that the mortality in the Maternity at Copenhagen has been kept steadily down for some years past, and in a chart attached to the paper, the dotted lines show a mortality in the lying-in hospital since 1876 but little higher than the town itself.

Incidentally it may be mentioned that Dr. Ingerslev conclusively shows, that in depreciating maternity hospitals, writers have clearly under estimated the mortality

from puerperal fever, both in towns and in country places. This he illustrates by referring to the statistics both in Denmark and Prussia. In Denmark the puerperal mortality between 15 and 45 years, up to quite lately, was above 11 per cent. of all women dying between those ages, and in Prussia it was considerably over 12 per cent.

Dr. Ingerslev further shows a most satisfactory diminution recently in the fatal results following delivery both in town and country, outside the hospitals in Denmark. These favorable results are entirely attributed to the use of antiseptics. Fortunately the midwives in that country are under the control of the State. Since 1881 a circular has been published by the Superior Council of Health giving to the midwives the most precise and sound instruction concerning the use of phenic acid, and it is obligatory to disinfect hands and instruments, &c., with this agent at a strength of 2 per cent. Phenic acid is distributed gratuitously among the poor for this purpose.

Further, instructions are given to medical men as well as midwives: (1) To make a declaration to the nearest superior physician whenever a case of puerperal mischief presents itself. (2) To declare each case of puerperal death; and lastly, the medical authorities are given the right to suspend a midwife whenever they believe it is requisite to do so.

At Copenhagen I made the acquaintance of the distinguished Prof. Pippingsköld, who kindly invited me to pay a visit to his Maternity Hospital at Helsingfors in Finland. I accepted the invitation, but unfortunately, on account of the difficulty of communication, there was a misunderstanding as to the time of my proposed arrival there, and the Professor, after expecting me for a week, had gone into the country when I arrived. Every arrangement was, however, made for my visit, and I received every attention from the physician in charge, Dr. Cederunt, who courteously showed me over the institution and explained its details. Prof. Pippingsköld has since most kindly sent me in manuscript an account which

he intends to publish, of his Maternity Hospital, from which I have extracted the chief points of interest.

I found the Maternity there built in the form of a spacious quadrangle, and the various sections were arranged in principle on the pavilion system. At one end of the quadrangle was a building containing the residence of the chief, the administrative offices, the lecture theatre and museum. The school for teaching was spacious, admirably arranged, and there were various diagrams and pieces of apparatus, quite original in design, ingeniously invented by the present professor for illustrating the mechanism of natural and morbid labour. The other buildings forming the wide square were each carefully adapted to their specific purpose, and were widely separated one from the other. One was devoted to a gynæcological department in which out-patients as well as in-patients were seen, and attached to this were beds for cases of ovariotomy or such other operations as fall within the domain of the special diseases of women.

From 600 to 650 midwifery cases are attended during the year, and about forty midwives and twenty men pupils are educated in the obstetric art annually. As Helsingfors has only a population of 45,000 inhabitants, the number of deliveries shows that the Maternity is largely resorted to by the population. The larger number of the patients were received gratuitously, and married and single women were admitted without distinction. The hospital was, however, to some extent self-supporting, as those who could afford it were expected to contribute, and about a fourth of those admitted paid some small sum towards their maintenance. A certain number of beds in a special pavilion were arranged for patients in easier circumstances, who paid more than the others, but even these did not pay more than from two to four marks each daily, a mark being equal to about eightpence in our money. The alimentation, or food supply, did not cost the institution more than 1·10 marks for the gratuitous patients, and about 1·50 marks for the paying patients.

The lying-in section of the hospital consisted of delivery rooms and convalescent wards separate from each other. The convalescent wards were built in pairs, one pair or "pavillon jumeau," as they are called, being constructed of wood, the other of brick, and no sanatory difference had been observed from the materials of construction. The rooms were spacious, very lofty, and contained six or eight beds in each; in all, beds for about forty-two patients. The beds were placed in the centre of the room, instead of at the sides, and so draughts were avoided. All were carefully arranged and scrupulously clean. The mattresses were stuffed with fresh rye straw for the non-paying patients, with horsehair or prepared bark of the lime tree for paying patients, and all were cleaned, baked, and re-made for each new case. There was this peculiarity about some of the beds which I have not seen in any other country, viz. that some had no mattresses at all, the patient lying on the clean bare boards forming the bottom of the bedstead. It was still warm weather, and this kind of bed, I was informed, is usual with the peasant class in Finland.

The windows were everywhere double on account of the rigour of the climate in winter, and ventilation and warmth were kept up by furnaces or stoves, invented by a Dane called Krarup. They were fed with pine or other wood, and were so devised that in cold weather they caused the entrance of a free supply of warm and pure air. The exhausted and vitiated air was effectually carried away by a ventilating shaft or chimney, one of which was supplied separately to each ward.

The antiseptic system was not followed with the same rigour at Helsingfors as at Copenhagen, but certain precautions were taken which collectively had succeeded in producing a very low rate of mortality. Thus, whenever a patient before or after delivery exhibited abnormal symptoms, she was instantly removed to one of the several rooms appropriated to pathological cases, in an entirely separate building. The midwives and pupils before

examining a patient were made to wash their hands and arms thoroughly with soap-and-water, and afterwards to rub them with dry hypochlorite of lime. Increased precautions were taken after a midwife or nurse had attended an infectious case, and all doctors and students were forbidden to take part in post-mortem examinations, or to touch infectious wounds without adopting certain precautions afterwards. The catheters (always in metal) and other instruments were disinfected after use by carbolic acid or other chemical agents, and the wards, after being occupied by eight or nine convalescents, were closed and thoroughly cleaned. Since last year the wards after occupation have been regularly disinfected with sulphurous acid vapour. This, however, is a modern innovation, as up to last year such disinfectants were reserved for special occasions, when diphtheria or some other cause of morbidity had been imported from without. The systematic use of disinfectants by vaginal injection was not the rule in ordinary uses. A single injection of carbolic acid and water was given commonly after delivery in primiparæ, simply to stimulate the healing of abrasions and lacerations, but they were only used more frequently when the lochia were offensive, or in morbid cases where their employment seemed specially indicated.

There was no disinfection of the ordinary linen. It was carefully washed only, but the woollen blankets being regarded as more retentive of morbific matters, were regularly saturated with sulphurous acid vapour.

As to the rest, the Professor preferred to trust to the purity of the atmosphere, the natural cleanly habits of the people, and the observance of scrupulous cleanliness in all details of hospital management. The purity of the atmosphere is greatly promoted by the natural situation of the hospital. It is built on a rock, well above the level of the town. The foundations are thus dry and clean. The buildings are well drained, and as they overlook the sea they are constantly bathed by the sea breezes.

I was informed that the Fins are a much more cleanly

people than the poor inhabitants of Sweden, Norway, Germany, and France; that they bathe frequently, and pay much attention to keep the skin clean and in good order. The precaution is nevertheless always taken of carefully washing the external genitals before delivery.

With these natural advantages to start with, Professor Pippingsköld remarks that his object is to protect as much as possible the natural progress of delivery and convalescence, and at the same time to disturb the women as little as may be by a slavish adherence to minute antiseptic precautions, which are not necessary in Helsingfors, but may be elsewhere.

The *mortality* and also the *morbility* have been supplied to me from 1872 to 1884. The present new Maternity was opened in 1879, and prior to this, under the old régime, the total mortality from 1872 to 1877 averaged 1·83 per cent., that from puerperal fever 1·26 per cent. In the new Maternity, from 1879 to November, 1884, there had been 3482 deliveries, the average total mortality had been only 1 per cent., and for only 0·60 per cent. of this was puerperal fever generated in the hospital accountable. It was calculated, therefore, that the lives of twenty-two mothers had been saved by the improved hygienic conditions of the last six years.

The *morbility* was considerably higher: in 1879 it was 12·10 per cent.; in 1880 6·36; in 1881 5·50; in 1882 3·50; in 1883 4·11.

An account is given of the nature of the illnesses or complications which are accountable for this morbility, but the death-rate seems singularly small in comparison.

Prof. Pippingsköld expresses his conviction that to ensure such favorable results, every maternity belonging to a large town, besides having all the advantages of good ventilation and scrupulous cleanliness, should be so spacious that it is never encumbered by too many patients at one time, and that rather than crowd it, the patients should be treated in a polyclinic outside. This he believes is the only way to avoid the necessity of using prodigious quan-

tities of carbolic acid and corrosive sublimate. He insists that what he calls "sovereign cleanliness" is the first and most powerful prophylactic; in the second line and as complementary, he places disinfectants, which in some localities and circumstances may be absolutely necessary.

The operations performed in Helsingfors had been followed by a remarkable success. Of 50 laparotomies, and 6 hysterectomies, all had ended happily; and of 44 ovariotomies 42 had recovered. I did not learn if carbolic spray had been used, but it is stated in the report that in no case had there been any septic or putrid infection,—a remarkable fact in hospital management.

I had remarked on the bareness of the walls in the various apartments, and the absence of such simple ornamentation as might cheer the patients during illness and convalescence; and Prof. Pippingsköld, in an amiable letter lately received, tells me that since his attention has been called to the matter he must admit his taste has been too Puritanical, and that in memory of my visit, and in recognition of a criticism which he is pleased to consider "full of humanity," he will at once set about making the wards more cheerful, and particularly he will put up pictures and images of the Virgin and Child, which the poor find much solace in contemplating.

At St. Petersburg, although most of our *confrères* were away for the autumn vacation, I received the most kindly attention from Dr. Balandin, the Chief of the Grand Duchess Catherine's Maternity Charity, and he was good enough to show me his institution in all its details. The hospital is humanely supported by the Grand Duchess Catherine of Mecklingburgh Strelitz, a cousin of the present Emperor, and she not only provides the funds, but takes a personal interest in its management. It is one of the chief lying-in hospitals in St. Petersburg and probably one of the most carefully regulated in the world. It has a midwifery school for male and female pupils within its precincts, and the museum contains a fine collection of deformed pelves made by the present Director. Here the

Medical Director, Dr. Balandin, now resides, having succeeded the celebrated Prof. Hugenberger, removed to Moscow. His suite of apartments is elegantly furnished and decorated with many beautiful works of art, most of them the gifts of grateful private patients.

The present hospital is an old building, converted and reorganised in accordance with modern sanitary science, and since 1878 considerably enlarged. I was shown the plans, indicating precisely the uses to which the various sections of the building were appropriated. There were separate rooms for the actual process of delivery and for convalescence; a gynæcological department as at Helsingfors; and careful provision was made for isolating the various sections, so that no germs of disease could be carried from one part to another. The keys of communication were only permitted to the heads of departments, and even the domestic offices were shut off by locked doors.

The windows here, as in the houses and hotels of St. Petersburg, were double on account of the cold, and in one place an underground tunnel allowed access from one wing to another, so as to obviate the effects of the severe climate in winter. Warmth and adequate ventilation were kept up by stoves or furnaces, so modified that only warm air is admitted, and this is constantly changed by an arrangement of flues.

Throughout the whole hospital there was the most perfect cleanliness observable,—in the apartments, in the attendants, in the beds, and in the various appliances. Every utensil, every instrument, every article of clothing, down to the warm woollen socks lent to the patients, were marked with the number of the room to which they belonged. As soon as any occupied room was vacated it was at once stripped and subjected to a cleansing and disinfecting process. The floors were laid with a mosaic concrete, and the walls half way up were of tiles; they could thus easily be washed at any time. At the several corners of the rooms were arranged taps and jets of water, so that the floors could be flooded at any time, and an

antiseptic used at the same time if required. As the floors sloped towards a drain or gutter, which carried the fluid away at once, the surface of the concrete soon dried and was then perfectly clean. Every apartment and corridor was furnished with its water supply of this kind, and by a simple contrivance it could be made instantly available in case of fire.

Every inspectress, midwife, and nurse was enveloped in a spotless white wrapper, and the medical men put these wrappers over their clothes during operations or hospital visits. The antiseptic system was carried out in the minutest detail, so as to shut out as far as possible all chance of disease germs gaining admittance. As an instance of the minute care taken in this respect, I may mention that fingers were not allowed to be dipped in the bottles of carbolized oil before examination, lest the oil should be contaminated, but the bottles were so fashioned that the oil oozes out by a small aperture as required (bottle shown). Dr. Balandin kindly gave me one of these oil bottles, and also one of the nurses' white envelopes (shown).

Across the gardens were the latrines for the domestics, and, some distance away from these on the same side, the laundries. The conduct of these laundries forms an important part of the antiseptic system. All soiled linen and other washing materials were first soaked in tubs of disinfecting fluid, and then passed on through different rooms for drying and pressing, &c., until they were ready for the linen store again. Each laundry-woman had her assigned duties, and had a room allotted to her near her work.

As a result of this careful management I learned that during the last three years there had been only one death from puerperal fever in the whole establishment, and this was in the case of a woman who was brought ill to the hospital and died three days after delivery. During the same period there had been six deaths from other causes. I regret that I have not been able as yet to procure the desired statistics, but hope to do so later.

Dr. Balandin informed me that he attached more importance to the diminution of *morbility* than to the bare figures of *mortality*, and this in his hospital had steadily declined. Indeed, even before the introduction of the so-called "antiseptic" system, the influence of absolute cleanliness had produced a sensible influence in this direction. This is the more remarkable as in the city of St. Pètersburg itself, outside the Maternity, both the general and puerperal mortality are very large.

I have been enabled to give a fuller description of the maternity hospitals in Copenhagen and in Helsingfors than of the one in St. Petersburg because I have the materials at hand concerning the former in the accurate descriptions and statistics given by Prof. Stadfelt in the paper previously alluded to, and I have had access also to the tables of Dr. Ingerslev. To aid me in my account of the Maternity in Helsingfors I have had the MS. of Prof. Pippingsköld, which I shall have much pleasure in presenting to the Society. In point of natural situation the hospital of Helsingfors is incomparably superior to the others. It is placed on an eminence overlooking the town and the Baltic with its wonderful fortifications. It is thus entirely removed, so far as position is concerned, from all town influences, and its construction is, so far as one could see in a brief evening visit, entirely in accordance with modern sanitary science. For comfort and perfection of cleanliness perhaps the St. Petersburg Maternity carries the palm, and in my admiration I asked Dr. Balandin if he was yet satisfied that he had shut out all chance of disease gaining admission to the hospital. To this he replied in the negative, but expressed himself satisfied with the progress achieved. As funds are always forthcoming for any improvements suggested, advance is not retarded by poverty.

We have, unfortunately, no parallel institutions in this country. Our lying-in hospitals are not subsidized by the State, nor are they are endowed by charitable imperial or royal princesses, and the difficulty of finding funds

raised by voluntary contributions is a great hindrance to the introduction of radical changes.

Ample funds and sufficient space are necessarily most potent aids in waging warfare with disease in hospitals, but even with limited means and space, absolute cleanliness, supplemented by the antiseptic system, may in our own country have a large influence for good, and the labours of our illustrious Lister prove of equal value to the obstetrician as to the surgeon. If I am not mistaken some of our Fellows can tell us of triumphs of this kind in the lying-in hospitals of London. The advantages gained by instructing midwives in the use of antiseptics for out-door practice in Copenhagen points to the necessity of equally teaching midwives in this country, and may emphasize to us who are in private practice the great good which may come by such precautions for ourselves.

Dr. Matthews Duncan often wondered at the great amount of time the Society spent, not unworthily, on small matters, while great or the greatest matters, such as Dr. Priestley had this evening brought before them, got very little attention. He regarded this subject of antiseptics in midwifery as the greatest of all in obstetrics or gynæcology. It had attracted too little attention. It was a far greater and more beneficent matter than inoculation in cholera of which we were hearing so much. It was as great as vaccination, and some German authors had elaborately shown it was even greater in beneficence than the discovery of Jenner; that is, it was the means of saving more lives. Cholera and smallpox came in epidemics; these were novel, and caused terror and astonishment, and attracted much public notice. Puerperal fever was, if it might be so called, a perpetual epidemic, a never-ceasing destroyer of lives—the most valuable, the most loved in the community—and yet this grand discovery, or this application of a discovery, was little heard of. A single puerperal death of a great person made a noise for a short time, but the constant stream of puerperal calamities was unheeded because it was constant. It has been only in recent times possible to make out statistically the value of antiseptics, because it was only recently that the profession had come near to a consensus as to the mortality of childbed. Some men had their thousands of cases without a death, and while he did not doubt their veracity he did not accept their statements. No

practitioner, no plan could claim immunity from deformed pelvis, from placenta prævia, from puerperal convulsions, from phlegmasia dolens, from puerperal inflammations, nor from puerperal scarlatina or puerperal septicæmia, or puerperal insanity. The great statistician, Farr, began, in his work on this subject, by making statements barely courteous to those who had laboured to show the true mortality of childbed in Great Britain. He spoke of their putting false coin in circulation, and of the unreasonableness, or cruelty, of women being submitted to the fearful ordeal of childbearing if the alleged great mortality were true. But before he died, he came very close to accepting the now generally accredited view—that about 1 in 120 died in childbirth, or within a few weeks after delivery. Hospitals, in consequence of ignorance as to the vastness of this mortality, had got a great deal of unjustifiable abuse. He had always defended the good or the better hospitals, and he was proud to know that now, when thoroughly antiseptically managed, they needed no defence. Their mortality was equal to, if not less than, that of private practice. During his whole life he (Dr. Matthews Duncan) had watched the generous and persevering attempts of his brethren to improve midwifery hospitals. Long ago, in Dr. Rigby's time, he came to London and saw a great ventilating scheme which was to work wonders. Architectural arrangements, drainage, ventilation, segregation, drugs, had all been tried, and all without securing success. The mortality in hospitals was terrible. He did not know what it was in private practice; probably it was as bad, or nearly as bad, as in good hospitals. Antiseptics, and antiseptics alone, had brought success and had sustained success. It was, he knew, common, in highly-respected quarters in London, to attribute this modern success or diminished mortality in general hospitals, as in lying-in hospitals, to many factors—to improved feeding, housing, cleanliness, nursing, and antiseptics; and, no doubt all were important, but all had failed till the antiseptic era, and all would fail again were antiseptic precautions—transcendental cleanliness—neglected. It was sad to reflect on the much greater progress of antiseptic midwifery abroad, on the continent of Europe, than in Great Britain and Ireland. There the great mass of women were attended by midwives who, acting under State regulations, were required to keep themselves supplied with antiseptics and systematically and thoroughly use them. They were liable to punishment if they did not use them. With us the great majority of women were attended by licensed practitioners, and he hoped our Government would not take out of their hands any part of the management of puerperal cases. Prescriptions by Act of Parliament, as in the case of vaccination, he would object to strenuously. But he hoped that, without this coercion, every member of the profession would gracefully introduce thorough

antiseptic precautions into his practice. He (Dr. Matthews Duncan) knew, by consultation experience and otherwise, that at present this was done by very few, or done in a ridiculously imperfect and inefficient way. No one could doubt the generous and noble zeal of our medical men, and he hoped that one effect of this paper would be to hasten the universal diffusion of the use of antiseptic precautions in midwifery.

Dr. JOHN WILLIAMS said that in discussing the use of antiseptics in midwifery we should place distinctly before ourselves what is to be gained by their employment. We cannot abolish deaths from the effects of pregnancy and labour, but we may be able, as our means are perfected, to abolish deaths from puerperal fever or septicæmia. This is nearly approached in the hospital at St. Petersburg, where only one death has occurred from puerperal fever during the last three years. The results of Stadtfelt and Pippingskōld, however, are little better than those obtained in the Rotunda before the use of antiseptics. During his seven years of office as Master of the Rotunda, Collins admitted about 16,000 women, had two epidemics of puerperal fever in which about eighty died, and his total mortality amounted to 1 per cent. The present Master of the Rotunda, Dr. Macan, admitted during his first year of office 1090, and of these six died, two of which, at least, were from other causes than septicæmia. This excellent result has been obtained by careful antiseptic precautions. Dr. M'Clintock calculated that one fourth of the deaths in childbed were not due to childbed. Taking the deaths in childbed at 1 per cent., the lowest mortality in childbed after the extinction of puerperal fever would be ¼ per cent. or 2·2 per 1000; and our object should be to reduce our mortality to this level, and we should not be satisfied until we had succeeded; and I believe it is to be gained by the proper use of antiseptics. This was the object my colleague, Dr. Champneys, and myself set before ourselves at the General Lying-in Hospital, but we have not attained it, for during the first four years we have had charge of the institution, there have been seven deaths in 1174, or a little more than ½ per cent. During the first twelve or eighteen months we used carbolic acid; during a second like period permanganate of potash; and since May, 1884, corrosive sublimate. During the first two periods we had a good deal of illness although the mortality was low. Since corrosive sublimate has been in use we have had no death from puerperal fever and almost an entire absence of morbility. The mortality I have mentioned is our TOTAL mortality; for all cases which were not well at the expiration of their discharge at the hospital were admitted into St. George's under the care of Dr. Champneys, or into University under my care, and the result was incorporated in the statistics of the General Lying-in Hospital.

Dr. CHAMPNEYS said that the total mortality from all causes in the General Lying-in Hospital in the last four years and a half, since Dr. Williams and he had had charge of it, was 9 in 1360, that is 1 in 151 or ·66 per cent. The last two deaths were from advanced phthisis, with which the patients were practically moribund on admission, but desire for favorable statistics did not bar their admission to the hospital. These results are decidedly good at the present time, though it is hoped to improve them in the future. The greatest care is taken to follow up the cases; on discharge, each patient is furnished with a post-card directed to the hospital, on which she is requested to write her state and that of the infant, about a month after her discharge, or six weeks after her confinement. No statistics of dying in hospitals are trustworthy which do not give the total mortality from all causes, and which do not state that no patient was transferred to another hospital, or that, if transferred, her progress was ascertained. The statement that no deaths occurred from puerperal fever is worthless in the absence of the whole mortality, and, indeed, all cases dying after childbirth are presumably, or in the absence of distinct proof to the contrary, cases of puerperal fever, and such cases often give unmistakeable though unexpected evidence of septic processes after death. Thus the statement quoted by Dr. Priestley from the St. Petersburg Hospital, that in the last three years there has only been one death from puerperal fever, while there have been six deaths from other causes, does not carry conviction. This is certainly a most unusual proportion; what *were* the causes of the six deaths? The triumphs of antiseptics have been greatest in the most filthy surroundings; where cleanliness and general hygiene has been attended to, the benefit, though undoubted, is less striking. Antiseptic teaching should be as clear and as definite as possible. If details were unnecessarily multiplied, nurses, and even practitioners, were liable to confuse the essentials with non-essentials, and even to throw the whole thing overboard. He found no difficulty in carrying out the same details in private as in hospital. The all-important thing is scrupulous antiseptic cleanliness of the hands. On this he insisted on the part of nurses, as well as on his own, and inspection of the nails and skin of the hands of nurses was important on this account.

Dr. WEST said that as an old teacher of midwifery, although for twenty years he had given up that department of practice, he was much interested in all that concerned the antiseptic treatment of parturient women. He thought, however, that for the full success of these measures it was of essential importance that there should be a distinct pronouncement on the part either of teachers of obstetrics, or still better, on the part of the Obstetrical Society itself, as to what was actually essential in this antiseptic treatment. In some places, as for instance in Vienna, antiseptic

measures were carried into most minute details, including not only frequent washing out of the vagina with medicated solutions, but also the introduction of iodoform into the uterine cavity. He feared that women would dislike extremely that incessant interference during labour, which would not only be wrong in itself, but would be suggestive to their minds of some great and hitherto unknown peril accompanying the process of labour. He was therefore anxious to see rules distinctly laid down defining, not how much *might*, but how little *need* be done in order to ensure to the parturient woman the important benefits which beyond all doubt accrued from the adoption of antiseptic measures in the management of the lying-in woman.

Dr. PLAYFAIR said that he would wish to say a few words on a topic that had already been touched upon by Dr. Matthews Duncan, viz. the importance of antiseptic precautions in private midwifery practice. He felt certain that there was no reform more urgently needed than a change in the practice of medical men in this respect. He was sure that at the present time not one man in a hundred ever used antiseptics in a regular and systematic manner. As a matter of fact there were none of the practical difficulties in this that Dr. West seemed to anticipate. For some years he had had as close an approach to rigid antisepticism carried out in his own practice as was possible in midwifery, in which, of course, absolute asepticism, as it was understood in surgery, was an impossibility, and he had never met with any difficulties either on the part of patients or nurses. To make the matter more easy he supplied each nurse with a card on which a series of "antiseptic rules for monthly nurses" were legibly printed, and he insisted on these being rigidly followed. They were very simple, and the chief point was that a basin containing an antiseptic fluid was to be placed at the side of every patient, and the nurse was not allowed to touch the patient near the vulva without rinsing her hands in it, and the same precaution was taken with all sponges, catheters, and the like. A solution of 1 in 1000 of perchloride of mercury was used in preference to 1 in 20 solution of carbolic acid, as the nurses often objected to the latter on account of the roughness of the hands it produced. The matter was really more important for nurses and midwives than for medical men, for the former were constantly touching the genitals, while the latter, as a rule, only did so during the labour itself. Moreover, faults of carelessness and uncleanliness were very common with nurses, who might leave soiled sheets or diapers for hours in contact with a patient, or use syringes unwashed or covered with decaying animal secretions, and thus produce septic mischief which was unjustly imputed to some fault on the part of the medical man. He earnestly hoped that the day was not far distant when the regular use of antiseptics in ordinary midwifery would be the routine practice,

and he was satisfied that when it was so a most marked improvement both in puerperal mortality and morbility would be established.

After some remarks by Sir JOSEPH LISTER—

Dr. R. A. GIBBONS said it was a great advantage to have the presence of Sir Joseph Lister, and if it were not too late in the evening it would be of much value if he would be good enough to state, for the benefit of the Fellows, what he considered the proper strength of the carbolised vaseline and solutions should be, in order to carry out thoroughly antiseptic treatment. It was the practice of many to use a few drops of some carbolic solution in any quantity of water, and in so doing they professed to carry out what they termed antiseptic precautions, whereas they were nothing of the kind. Moreover, strangely enough, many of those who did this conscientiously believed that such practice was all that was necessary in antiseptic midwifery. He had always used solutions of a strength which Sir Joseph Lister considered safe when he (Dr. Gibbons) was his dresser some years ago, namely, 1 in 20, and he did not like to trust to anything weaker than this, although for catheters, &c., a strength of 1 in 10 was safer. But as so many used solutions and vaseline of much less strength, it would be of the highest importance if a definite standard could be agreed upon by all, so that this point might be considered a settled one.

Dr. MURPHY (Sunderland) was disappointed with the limits the discussion confined itself to, which only amounted to whether antiseptics were useful in obstetrics, and repeating (as each speaker had done) that they were most valuable, was he believed as unnecessary at the present day as repeating that the three classical specifics were useful for their respective diseases; but even within these limits a useful discussion might take place as to the best means of using them, and as a provincial Fellow he regretted very much with Dr. West that the mode of applying antiseptic treatment and the various germicides was not more specifically explained. For when one heard of women being delivered under spray in at least one London hospital one almost feared that legitimate enthusiasm had its limits. One question occurred to the speaker on which he would gladly learn the opinion of the Society, and it was one which frequently occurred to a consultant in midwifery, and a definite opinion by the members of this Society would be of use in guiding a man's actions when so placed. The question was this: a consultant is called in by a brother practitioner to a case of puerperal fever, goes and carefully examines the case; is he justified in attending a labour case within the next few days? We were told in the text-books that a man must give up attendance on midwifery for several months after having met with a case of puerperal fever, &c., and men in general practice often did so, but how about the consultant? He

surely was as liable to convey the infection from one patient to another as the usual attendant, and must he absolutely refuse to see all cases of septic origin, or else give up attendance on midwifery for several months after each case? For his own part the speaker would venture to express an opinion that all risk could be avoided by changing one's clothes completely, and by taking a warm bath in a solution of carbolic acid, say 1 in 100, in which one should remain for half an hour, during a portion of which time one's whole body, hair, face, &c., should be completely submerged, and, most important of all, a free and liberal allowance of the use of the nail-brush made to one's hands. Statistics had been freely used to-night. Well, all statistics should be read with the rules laid down by Locke for considering "the testimony of others," but in septic diseases statistics were more unreliable than ever. We were all glad to submit our number of cases of eclampsia, or placenta prævia, but no man yet had ventured to publish a long series of consecutive cases of post-partum hæmorrhage or puerperal fever, for reasons that were quite apparent, and what one would look upon as puerperal fever in another man's practice, one sometimes called pneumonia, scarlet fever, shock, exhaustion due to indiscretion of some kind, &c., when occurring in one's own. And in quoting statistics of such an hospital as the Rotunda, it should be borne in mind that the number of serious cases admitted largely depended on the recognised skill of the Master, as when an able and accomplished Master, such as Dr. George Johnston, presided, serious cases were sent from all parts of Ireland, and indeed Scotland and England, to have the benefit of his attendance when a serious complication was anticipated. Some of the Fellows may remember the chart of mortality in Professor Tarnier's private room at his hospital in Paris, in which two remarkable falls at once strike the observer, the one dating from the year in which sick patients were removed from the general wards; and the other, a very marked one, when antiseptics were introduced five years ago.

Dr. Braxton Hicks entirely endorsed that which had been said by Dr. Matthews Duncan regarding antiseptics in midwifery. When one remembered the state of the lying-in hospitals in the past, anything which contributed to results mentioned by the previous speakers must be hailed with delight. But he could not agree with Dr. Matthews Duncan in one point, namely, regarding the death-rate in certain practices. When gentlemen said that their death-rate was one or so in a thousand, Dr. Hicks did not think we ought to discredit them unless it could be plainly shown that there was want of care in following the cases afterwards. Dr. Hicks, at any rate, could be quite confident of his own cases. During ten years of his

early life he attended from eighty to a hundred a year, and in these he had only one death, which was puerperal pyæmia. He was certain of the facts as he knew of all his cases for long after. He considered, as he had expressed in his writings, that in reckoning up the influences of disturbing causes, the including the morbility was as important as, if not more so than, the mortality, and if this could be lessened, as it was shown it had been in hospitals, this also was a very great advantage. There was, however, one point which made him fear that we might not quite eradicate every cause: this was that the natural discharges, after delivery in apparently healthy women, had been found in experiments on rabbits the most productive of pyæmia of any substance, as shown in the prize paper of the Medical Society on pyæmia. If this was the state of the discharges in health, it would be difficult to avoid its introduction into the system when any insuck took place in consequence of sudden movement. Regarding the percentage of antiseptics in vaseline, oil or lard, he thought this alone was of little consequence so long as the hands were clean and well disinfected.

Dr. HARVEY remarked that in Calcutta for many years past it had been the rule that in all vaginal examinations carbolised oil must be used, and that vaginal injections of carbolic water or solution of perchloride of mercury should be employed the moment the slightest fœtor was noticed in the discharge. When high temperature accompanied fœtor intra-uterine injections were resorted to. He believed that good had resulted, but the mortality must always be high since patients were frequently admitted for delivery who had been many hours or days in labour, with septicæmia already fully developed.

Dr. PRIESTLEY, in reply, thanked the Society for the favour with which his paper had been received. His object in bringing it before the Society was to impress the minds of obstetrical practitioners with the necessity of observing antiseptic precautions, and the more the necessity was reiterated the more likely were the precautions to be observed. Dr. Matthews Duncan had remarked with perfect accuracy that the use of antiseptics in midwifery was not as yet common among practitioners in this country, and until they were more universally adopted in private practice, a puerperal woman might be safer in a lying-in hospital where the antiseptic system was strictly enforced than if delivered in her own house, where no antiseptics were used. It was curious to note in the lying-in hospitals which he had visited how the need for antiseptics varied with the position of the hospital and the purity of the surrounding atmosphere. At Helsingfors, the hospital was well raised above the neighbouring town, and was habitually bathed by the pure sea breezes. Here a less amount of antiseptic precaution sufficed to keep down both the mortality and morbility.

In Copenhagen and St. Petersburg on the other hand, the hospitals were situated in the midst of the town, and a much stricter system was required to exclude the germs of disease. The efficiency of antiseptic precautions in the St. Petersburg Maternity was the more remarkable, because in the town itself not only the maternal, but also the general mortality was very large. He was glad to learn that so favorable result had been obtained in the General Lying-in Hospital, and Dr. John Williams and Dr. Champneys were to be congratulated on their success. In a letter addressed to him by Dr. Grigg it appeared that good results had also been experienced in Queen Charlotte's Lying-in Hospital. He thought the inquiry of Dr. West concerning the minimum of antiseptic precaution which was absolutely needful to ensure immunity from puerperal disease a very pertinent one. A very strict method was irksome to patients and often difficult to enforce; and yet it would be the duty of the medical man to urge so much as might be necessary for safety without pedantically insisting on what might only possibly be useful. The researches of Pasteur and of the distinguished visitor of the evening, Sir Joseph Lister, had raised doubts if there really was such a thing as auto-genetic infection, as laid down by certain authors. The presumption was that all germs of disease were introduced from without. If that were so, the indications of primary importance was perfect cleanliness in all the surroundings of the lying-in room, and of the person and clothes of the medical practitioner. The immersion of the hands in carbolic acid and water, or in a solution of corrosive sublimate, should be observed before all vaginal examinations, both during and after labour, and everything applied to the genitals of the patient should be of the nature of an antiseptic dressing or at least perfectly clean. In this way it might be possible to dispense with disinfecting vaginal injections, but in the meantime he regarded them as useful adjuncts to other antiseptic precautions, and he continued them, when they did not unduly disturb the patient, or were not strongly objected to. Many patients liked and appreciated them as conducing to greater cleanliness. Next in importance to care on the part of the doctor was cleanliness and care on the part of the monthly nurse, and he thought it would be very desirable to issue printed instructions to all monthly nurses, as indicated by Dr. Playfair, concerning the details of antiseptic precautions which it was necessary for them to adopt. He was sure a large amount of puerperal mortality and illness might be prevented by the antiseptic method in private practice as in hospitals.

OCTOBER 7TH, 1885.

JOHN B. POTTER, M.D., President, in the Chair.

Present—54 Fellows and 10 visitors.

Books were presented by Dr. Church, Dr. W. J. Collins, Dr. W. H. Day, Sir Henry W. Acland, Mr. R. W. Parker, Dr. Roose, Dr. W. L. Richardson, Dr. Priestley, Dr. West, Dr. John Williams, the Council of University College, and the Société des Sciences Médicales de Lyon.

Emil Arnold Praeger, L.F.P.S.G. (British Columbia), and William Charles Everley Taylor, M.R.C.P. Ed. (Scarborough), were declared admitted as Fellows of the Society.

The following gentlemen were elected Fellows:—Daniel Herbert Bastable, L.K.Q.C.P.; J. Brice Bunny, L.R.C.P. Ed. (Newbury); and W. Radford Dakin, M.D.

The following gentlemen were proposed for election:—Thomas Boyle, M.R.C.S. (Newquay); Thomas Hillier Chittenden, L.R.C.P. Lond. (Welwyn); Ogilvie Grant, M.D. Edin. (Inverness); Edward Ferdinand Grün, M.R.C.S. (Putney); Robert Alexander Jamieson, M.D. (Shanghai); Edmund Wilkinson Roughton, M.D.; and Albert Wilson, M.D. Edin. (Leytonstone).

FŒTUS AND MEMBRANES FROM A CASE OF MISSED ABORTION.

By Alban Doran.

This specimen consisted of a minute fœtus with the membranes entire. When recent the membranes appeared a dark heavy mass, very different from their normal condition, and several deposits of old, friable clot formed tubercular masses, some half an inch in thickness and nearly an inch in diameter, in the substance of the placenta. The umbilical cord was about an inch in length. Its proximal half had become converted into a thin, white cylindrical cord resembling a tendon; its distal half was dropsical, being dilated so as to form a thin-walled cyst half an inch in diameter. On the free surface of the cyst lay a white, somewhat shrivelled lump, covered with a very thin layer of lymph and a few minute coagula forming red spots and streaks. It proved to be a fœtus about half an inch in length.

The patient was a married woman aged 25, the mother of three children, the youngest being two years and a half old. She ceased to menstruate after Christmas, 1884. Early in April, 1885, she had a fall, followed by severe pain in the left iliac region. She believed herself, at that date, to be four months pregnant. On April 20th, uterine hæmorrhage occurred and continued with considerable severity for five days.

On April 29th the hæmorrhage recurred. She believed that her abdomen became flatter after the fall and the bleeding. On April 30th the patient consulted Mr. J. Malcolm at the out-patient department of the Samaritan Free Hospital. That surgeon made the following notes:

April 30th.—"Uterus seems slightly enlarged, cervix natural length, os fissured at one side, breasts natural,

no milk, sound not passed." Quinine and nux vomica prescribed.

June 28th.—"Patient, I believe, is not pregnant, sound not used."

Mr. Malcolm never saw the case again. He declared that the enlargement of the uterus puzzled him, that the stationary condition of that organ after a month's observation counter-indicated pregnancy, yet he did not like to pass the sound. On the morning of August 19th the patient was delivered of this specimen, no show having occurred since she had last attended at the Samaritan Hospital. Mr. Carr Holstock Roberts had been called in on the 18th; on visiting the patient the next morning this specimen was given to him. He kindly sent it to the exhibitor, who after examining it and obtaining the history from Mr. Roberts and Mr. Malcolm, presented it to the museum of the Royal College of Surgeons of England, where it is now preserved in the series illustrating "Injuries and Diseases incidental to Gestation and Parturition."

This specimen probably illustrated missed abortion. The fœtus appeared as if in the fifth or sixth week of development. It was hardly probable that the woman conceived after leaving Mr. Malcolm's care on June 28th. The fœtus had apparently died long before expulsion, and it had undergone, together with the placenta, degenerative changes. The clots in the placental tissue were old. It was most likely that the patient conceived shortly after Christmas, the fœtus dying at about the sixth week, from disease of the placenta. The fall in April caused hæmorrhage, probably through partial detachment of the membranes.

CASE OF SUPPOSED EXTRA-UTERINE GESTATION WITH BIRTH THROUGH UTERUS.

By E. F. Grün.

This specimen consists of a fœtus and placenta believed to have been formed within the right Fallopian tube, and discharged thence through the uterine orifice of that tube.

The history of the case is as follows: Mrs. M—, residing at Putney, consulted me on the 14th of September, stating that she was last unwell on the 14th of April, but since then had had no discharge of any kind. During the months of April, May, and July she had suffered from morning sickness, and her abdomen and breasts had enlarged. About the middle of July the sickness stopped, her abdomen and breasts decreased in size, and she went back to her original shape. Since the cessation of the sickness she had been feeling very ill in herself, and she complained of a sense of coldness about the abdomen, also a dragging pain in the right side, and a feeling of weariness and heaviness about the limbs.

On vaginal examination the uterus was found not enlarged, freely moveable, and not at all tender; the os was closed, cervix hard and not presenting any of the symptoms of pregnancy; a sound passed two and a half inches. To the right of the uterus a tumour was felt per vaginam and through the abdomen, tender on pressure, oval in shape, and as large as a cricket ball. A sponge tent was inserted, and the patient left till the following morning, when another tent was inserted. The next day, September 16th, I examined patient under chloroform, and passed the finger into the uterus up to the fundus; the orifices of both Fallopian tubes

were felt, and the right noticed especially as being more open than the left; it was sufficiently open to have admitted the passage of a sound. The interior of the uterus was perfectly smooth and there was no sign of any decidua present. There was no hæmorrhage throughout the whole examination. The examination being completed, the patient on recovering consciousness was given a drachm of the liquid extract of ergot, and she was left in charge of an experienced midwife. Four hours afterwards I was sent for, the woman being in considerable pain and flooding having come on. On reaching patient she presented all the appearances of being in labour, regular pains coming on with great force at frequent intervals. The pain was referred to the side and was of a regular bearing-down character. On vaginal examination a fœtus was felt to be projecting from the os; this was removed and a portion of placenta was felt to occupy the cavity of the womb; this was seized with Dr. Barnes's ovum forceps and extracted. The patient then became comparatively free from pain, and although the hæmorrhage was rather free it was controlled with an injection of sclerotic acid, and ultimately the patient made a good recovery and the inguinal tumour disappeared. The placenta is of a tubular shape and formed of ordinary placental tissue.

Dr. GERVIS suggested whether the case might not be one of gestation in a double uterus, and asked if it would be possible for the woman to be examined with reference to this point.

A committee, consisting of Dr. Herman, Mr. Doran, and Mr. Grün was appointed to examine and report upon the specimen, and, if possible, upon the condition of the patient.

REPORT OF THE COMMITTEE APPOINTED TO EXAMINE DR. HARVEY'S SPECIMEN OF RUPTURE OF UTERUS. (See p. 191.)

THE uterus is pear-shaped. The peritoneum on the front aspect is thrown into wrinkles, which slope from the middle line outwards and downwards, beginning at a point about one inch below the fundus. Over a space the size of a shilling the wrinkles appear to be absent, but are really very minute. On the back of the uterus the lower half is marked by wrinkles of the same kind, sloping outwards and a little upwards from the middle line, where there is a slightly elevated ridge free from wrinkles and about the breadth of the little finger.

The Fallopian tubes, ovaries, ovarian, broad, and round ligaments are normal in development and arrangement.

On the back and left side of the fundus, running from the right anteriorly to the left backwards and downwards, is a wide, gaping rent, about three inches long, the edges of which are rounded and everted, and are marked everywhere by dark spots the size of a hemp-seed, representing uterine sinuses.

Around the anterior and upper half of the sides of the rent is still evidence of the scar tissue described in the recent specimen along the peritoneal border of the rent. The uterine tissue of the lower border of the rent is torn obliquely, forming a thin jagged edge, projecting from the right side of the rent.

From the whole of the posterior surface of the uterus, including the tubes and ovaries, extend long, well-organized bands of adhesions to the colon, to which the left appendages are firmly adherent by a band of tissue an inch long and the thickness of the little finger. The fimbriæ of the tube are free, but the ovary is enclosed in firm membranous adhesions. A line of adhesions surrounds the edges of the rent.

An oblong piece of the uterine wall was removed from

the lower part of the front of the womb above the internal orifice. The tissue which was cut through shows no alteration in thickness and there is no indication of the ring of Bandl. The cervix is about an inch in length, and the os externum admits the tip of the little finger; it is oval in shape and appears uninjured.

On a separate loop of small intestine there are distinct traces of placental tissue. Well-formed chorionic villi were detected on microscopical examination.

The cicatrix is not sufficiently defined to justify an opinion whether or not it was due to an injury received before the pregnancy. In the absence of all history the specimen cannot be held to upset the accepted theory that the body of a healthy and normal uterus is never the seat of primary spontaneous rupture. The growth of well-formed chorionic villi on the intestine would seem to show that the extrusion of the placenta occurred early in pregnancy.

Measurements.

	Inches.
Vertical external measurement of uterus from fundus to os externum	6
Transverse measurement of uterus	4
Depth „ „ (about) . . .	2
Thickness of uterine wall along border of rupture	½
Ditto „ artificial incision above cervix	¾

F. H. Champneys.
Alban Doran.

ON THE HYPERTROPHY OF LUPUS OF THE FEMALE GENERATIVE ORGANS.

By J. Matthews Duncan, M.D.

Hypertrophy is not an essential part of lupus of the female genital organs. It is not rare to see a case of lupus minimus last for years without any hypertrophy. The cases I refer to are generally characterized by small ulcerations, more or less deep, of the labia or vestibule, with little discharge; and if examined after an interval of months or of a year, there are still the ulcers, or new ones have arisen in place of the former or in addition to them, but there is no hypertrophy. No doubt in most such cases a hypertrophy does appear—a urethral caruncle or a lump on the hymen or elsewhere—but it is far from being the rule. Extensive ulceration may, indeed, occur without any hypertrophy.

Hypertrophy may occur without ulceration, but this is rare; and I have never seen hypertrophy considerable in bulk without ulceration. The ulceration attendant on hypertrophy may be on the enlarged part or may be more or less remote from it.

It appears, indeed, to be more just to regard ulceration and hypertrophy as accidents of the originally diseased part, alternative of one another, rather than as concomitants. The diseased tissue may grow and accumulate, or it may disintegrate and disappear, yet both processes may go on simultaneously in different parts in the same case.

The hypertrophies may be small or very great in bulk. I have never seen, in any other part of the body, such masses of true hypertrophic lupus as not rarely occur in the pudendum. They are sometimes, in the labium, so

large as to suggest that the disease is elephantiasis. Cases of elephantiasis of the labia, as of the scrotum, are well known, but I have not seen one. The characters and history of the cases now under consideration easily distinguish them from cases of that disease.

So far as my experience has gone, the evident ulceration of lupus has done, in individual cases, more destruction of tissue than hypertrophy has increased its quantity. In Macdonald's case* the amount of tissue removed in the ano-perineal region was greater than the great amount of tissue produced in the case of L. F— (Case 4) which I described in my paper on the "Ulceration of Lupus."

While the ulcerative process may destroy any tissue except bone, the hypertrophic process is known to me only as affecting skin or mucous membrane, subjacent connective tissue, and their component structures, and the clitoris.

The parts most liable to great hypertrophies are the labia majora, the clitoris and its prepuce (lupus maximus); to minor or small hypertrophies, the urethral orifice and the hymen (lupus minimus).

A hypertrophied part may itself be the subject of a special hypertrophy, which latter is appended to it, not as a nodule or lobe, but as a new outgrowth, sessile or necked, or even pediculated. The hypertrophic tissue does not, as in cancer of the pudendum, grow into deep parts while it forms an outgrowth at the same time. Deep parts are destroyed by lupus only by progressive ulceration, generally, in this case, called exedent.

A hypertrophied part may so closely resemble a healthy part that its diseased condition can be assuredly made out, not by its own proper characters, but by actual observation of its growth, as in the case of A. S— (Case 1, p. 147) recorded in my former paper, where the left nympha became much enlarged; or, by comparison of size on one side with that on the other, as in the case of L. F— (Case 4) also previously recorded, in which both labia majora were

* 'Edinburgh Medical Journal' for April, 1884, p. 910.

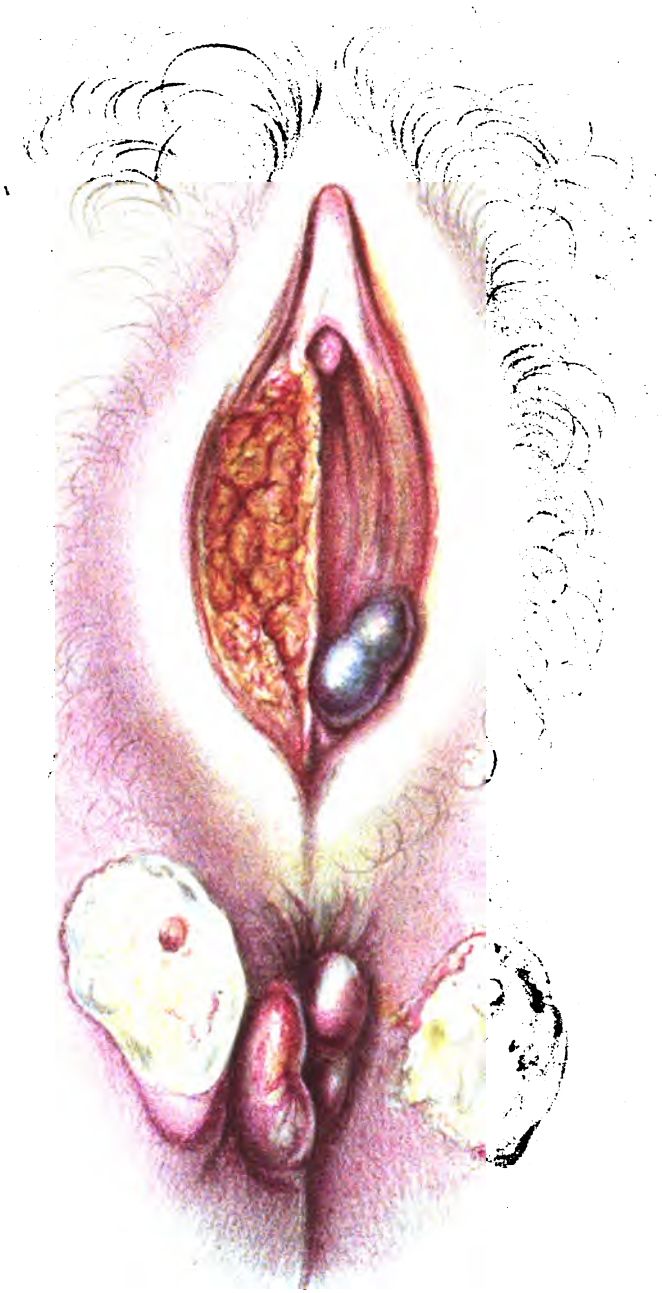
Hypertrophies when intensely inflamed are of deep red colour, but they may be of this colour without tenderness or other sign of inflammation. Generally they are of a pale red colour. Sometimes they are pigmented brownish. The most extraordinary colour seen is the dead white colour. This may affect the whole of a polypoid hypertrophy and its stalk. In a sessile or necked hypertrophic nodule the whiteness may affect the whole or part.

The hypertrophy may have varying degrees of hardness, a brawny hardness, a stony hardness. In the case of L. F—, some of the white nodules were of almost stony hardness, while others were very soft; some again were stony-hard at one part and soft at another.

Before concluding, it is desirable to say that, while most urethral caruncles are a development of lupus, all certainly are not so. There is a small and often super-sensitive red caruncle, which is unaccompanied by any other evidence of disease, which is often polypoid, the stalk sometimes thread-like, and which is cured at once by removal. Such intensely sensitive caruncles are not very rare; sometimes they are not sensitive.

Case 1. *Lupus hypertrophicus ulcerosus; slight suspicion of syphilitic infection.*—M. C—, æt. 34, was admitted to Martha Ward on October 9th, 1881, from Magdalen Ward, where she had been under treatment for three months for what was supposed to be a syphilitic sore on the labium. Married in 1863; has been a widow for four years. Catamenia always regular; no children; no miscarriages. Has had no cutaneous rash, nor sore-throat, nor has she presented any sign of constitutional syphilis.

She states that eight months before admission to Magdalen Ward a small pimple appeared on the inner side of the right labium. This soon became an ulcer, and it has gradually extended to be as big as a halfpenny, affecting the whole right side of the vaginal orifice. The glands on the groin are slightly enlarged. Around the anus are purplish prominences, and there are some old



T Godart del

West Newman & Co chrom lith

cicatrices, which she says are the result of an operation for fistula which she underwent two years ago.

Now, the right labium is found to project considerably, being swollen (Plate VIII; drawing by Mr. Godart). On its inner surface, and extending along the side of the vaginal orifice, is an ulcer, somewhat oblong in shape, of about the area of a halfpenny, its base not indurated, and having a rough, granulating, not tender surface. On the inside of the posterior part of the left labium, opposite the ulcer on the right, is a rounded, not ulcerated, hardish mass, as big as a large field-bean. The urethra is healthy. When the hips are held apart the anus is seen as the centre of a circular area of three inches in diameter, and on this area are some irregular projecting masses. Adjacent to the area around the anus, there is, on each side, a rounded slightly indurated area, of the extent of a shilling, white and scaly on surface, with red edges at parts.

The galvanic cautery was freely used to cauterize ulceration and remove outgrowths. After separation of sloughs the wounds healed slowly. She left the hospital completely cured on January 3rd, 1882.

CASE 2. *Lupus hypertrophicus; pain in micturition; hypertrophy of right nympha; induration of fossa navicularis; small ulcerations; a minute perforation.*—M. A. T—, æt. 26, was admitted to Martha Ward on Nov. 9th, 1881. Has been married four years; no children; no miscarriages. Catamenia commenced at fourteen, and were regular till four years ago, since which time the intervals have occasionally varied; last period three weeks ago. She has never been strong, and for nine years has suffered from winter cough. Two and a half years ago was treated as an out-patient of the hospital for vaginal discharge and a sore on the left labium. She is a pale, anæmic-looking, but generally healthy woman.

Four months ago she began to have trouble with urination, being unable to retain her water when standing or walking, and having burning pain when passing it. She

is getting worse and worse. Urine acid, 1010, albumen $\frac{1}{10}$, also a little pus (Plate IX; drawing by Mr. Godart).

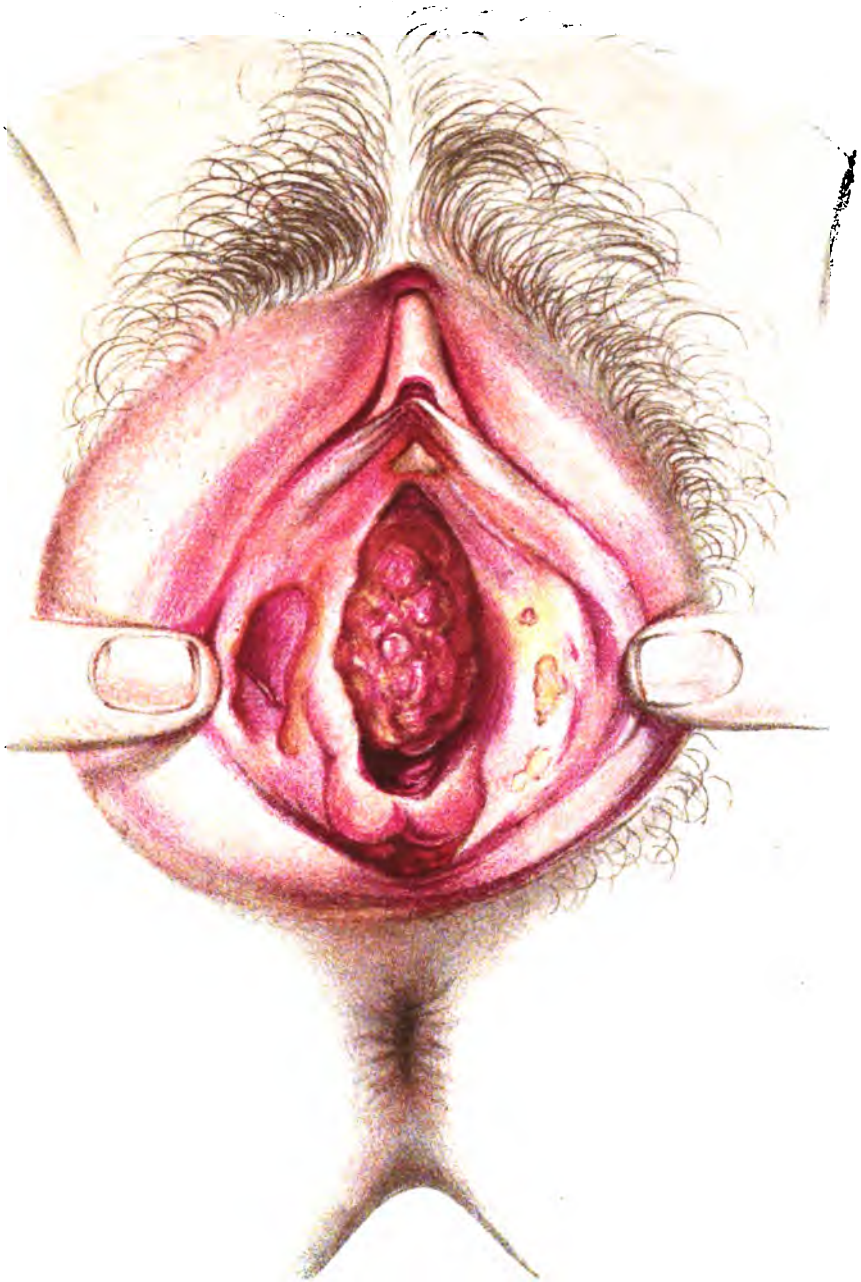
The orifice of the vagina is occupied by a tumour of the urethra, pale, red, nodulated, hard, not tender; about the size of a large filbert. Bladder measures five and three quarter inches from orifice of urethra, not tender. The orifice of the urethra admits the tip of the index finger; a No. 18 sound passes easily, a No. 22 with slight difficulty. Between the clitoris and urethra is a deep, hard-based ulceration of the triangular part of the vestibule. At the posterior margin of the vaginal orifice are small, indurated, caruncular nodules. The whole fossa navicularis is hard and feels like an excavation made in soft horn. In it is a small, pin-point perforation passing into the rectum. The labia are somewhat œdematous, the right nympha being especially enlarged. On the insides of both labia are irregular superficial ulcerations. The clitoris is hypertrophied, but does not project beyond the margin of the opposed labia. The inguinal glands are enlarged, scarcely tender, and freely moveable.

Is reported on November 15th as passing water only once in the night, and fifteen ounces at once. Urine 1020, acid, trace of albumen and very little pus. By the galvanic cautery wire the greater part of the right nympha, the urethral tumour, and the walls of the fossa navicularis were removed, and the vestibular ulcer was cauterized.

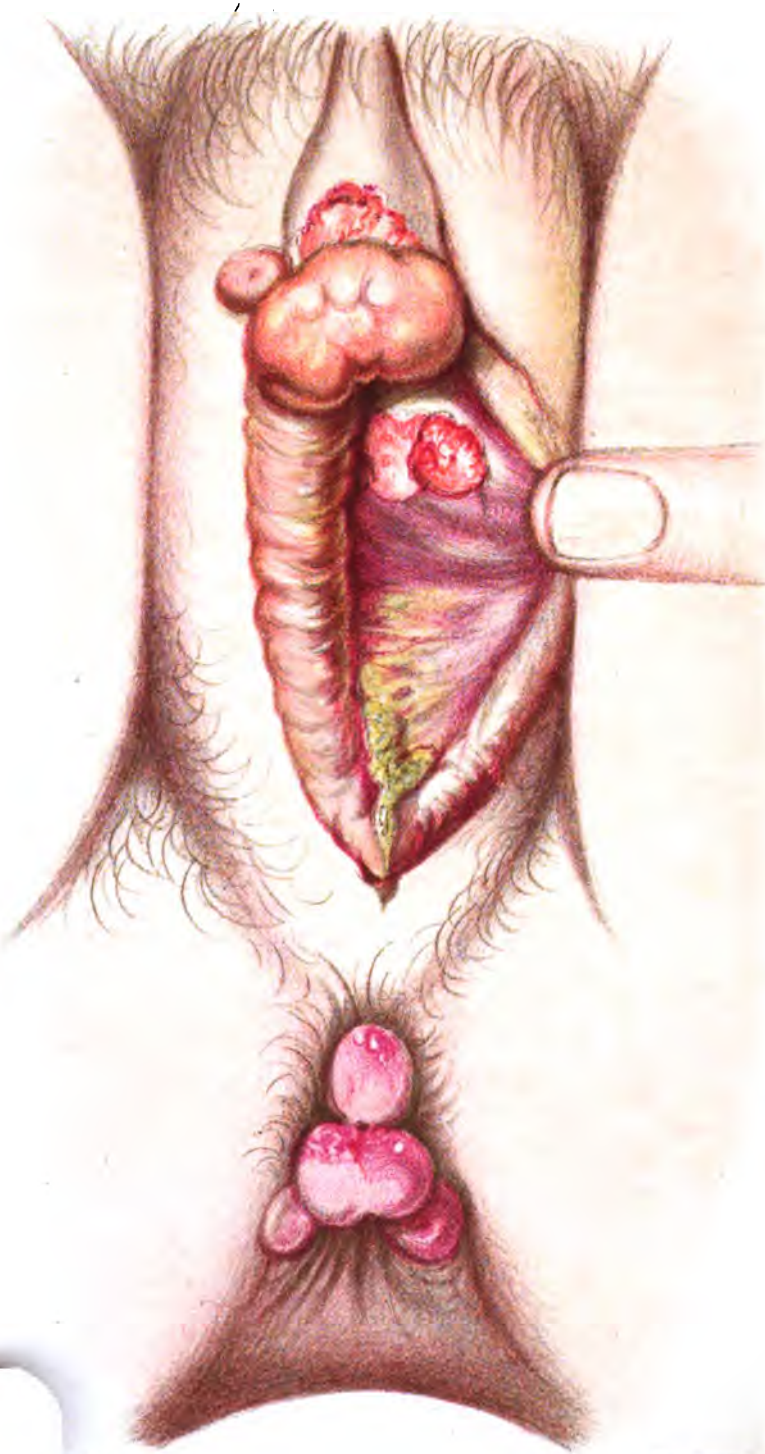
On December 2nd, all the wounds in the vulva are healthy and healing; the vestibular ulcer soft. Urethra contracted, a No. 18 bougie passing with difficulty. Has retained her water since the operation on the 15th.

On December 9th she was discharged; the wounds almost healed.

CASE 3. *Lupus hypertrophicus; no pain or tenderness in growths; difficulty and pain in micturition; hypertrophy of clitoris; growths around anus; ulceration of rectum and vagina; partial destruction of urethra; cystitis; rectitis.*—S. G—, æt. 29, was admitted to Martha Ward in the



T. Godart del. West, Newman & Co chrom. lith.



art del

latter part of May, 1883; has had five children, the last four years ago; no miscarriages. Catamenia began at fourteen and were regular till four years ago; have not appeared since then. Says a pimple appeared on the vulva four years ago, and that her disease has increased rapidly during the last six months. It occasionally gives issue to blood. Has no pain or tenderness. Great difficulty in micturition and cutting pain at the time. Has had, since last confinement, what she calls piles. Has suffered from rheumatism for four years.

She is a sickly-looking woman, has a chronic ulcer on cornea of right eye. Some scars around the mouth. Fissures and scabbing at muco-cutaneous junction on alæ nasi. Tongue clean, palate not ulcerated.

Inguinal glands and lymphatics slightly enlarged, not tender. The body of the clitoris is somewhat hypertrophied; in the situation of its glans is an irregularly shaped mass, of the size of a small chestnut and connected with the body by a neck (Plate X; drawing by Mr. Godart). Around the constricted portion is irregularly distributed ulceration. The labia majora are not hypertrophied and appear healthy. The labia minora are considerably hypertrophied and pass far backwards, completely surrounding vaginal orifice; their tissue and colouration seem natural, but there is some ulceration with angular outline on the upper part of their internal surfaces. The lower part of the vagina has numerous irregular hardish rugæ and fissures; these last being ulcerated and the whole bathed in pus. This condition is very marked on the anterior wall of the vagina, in its lower half. The rugæ are in parts exaggerated into pendulous masses. The vaginal orifice has been extensively destroyed, also the lower part of the urethra, its orifice being an inch within what is considered the site of the vaginal orifice. The bladder is somewhat tender and measures four and three quarter inches from the orifice of the urethra. Urine 1024, acid; albumen one third, large amount of pus, nearly a quarter. Around the right side

of the anus is an irregular, lobed and fenestrated outgrowth, not to be mistaken for piles. On the inside it is ulcerated, the rawness extending into the bowel. The finger introduced into the rectum finds it diseased as far as it can reach, somewhat hard, rugous, fissured, and bathed with pus. The bowels act frequently, with tenesmus.

On May 31st the hypertrophied parts were amputated by galvanic wire cautery, several vessels requiring ligation. On June 21st some remains of the nymphæ were removed in a like manner. The wounds made good progress in healing. When she left the hospital there was still a little ulceration unhealed, apparently healthy. The discharge of pus from the vagina and rectum was stopped. She had a small superficial ulcerating fissure in the left nostril, which had been there about ten weeks. It is healing under the use of Lotio Sodæ Bicarbonatis.

Case 4. *Lupus hypertrophicus; micturition painful; large growth of left nympha, latterly become tender; ulcerations of labia, rectum, and vagina.*—A. R—, æt. 32, was admitted into Martha Ward on May 25th, 1882. Has been married fourteen years; one child thirteen years ago; no miscarriages. Catamenia began at seventeen and have always been regular; last menstruation three weeks ago. Child had no skin rash; died when a year old from teething and convulsions. Seven years ago had a vaginal discharge with abscess on right groin; no skin-rash nor sore-throat. Since this time has had a bloody, purulent discharge. Has for four years noticed a lump growing on left side vulva; it has not been tender till the last fourteen days. Micturition sometimes scalding. Defæcation normal.

There is found, over right external inguinal ring, a scar half an inch long; no enlarged glands or lymphatics. Urine acid, 1025, albumen $\frac{1}{16}$; mucous cloud one third of column; pus-cells with crenate edges found by microscope (Plate XI; Mr. Godart's drawing). The right labium majus is healthy. The right nympha is red, somewhat hypertrophied, and has various specks of ulceration on its

PLATE XLVIII A

L. Godart del

West Newman & Co. chrom...

internal surface. Continuous with the clitoris, and springing from the whole of the left nympha, is a mass, nearly as big as an egg, irregularly nodulated, and tender. At the situation of the glans clitoridis is a deep ulceration with a healthy-looking surface, not bleeding when touched. The whole inside of the left labium minus is ulcerated. The vagina is extremely tender and secretes pus copiously. The ulceration on the left labium minus extends for an inch upwards into the vagina and involves the meatus urinarius. Just in front of the anus, on the left side, is a deep ulcer with projecting edges nearly half an inch in diameter, the base dusky, not indurated. Outside the posterior part of the right labium is a similar ulceration, occupying a small part of the surface of a red, slightly prominent, nodular mass.

On June 2 the hypertrophied labium was removed by a galvanic wire cautery; several arteries were tied. The ulcerations were well seared by the same cautery.

On June 21st the ulcers were found to be healed, leaving no trace behind of their presence. The ulceration of the inner side of the left labium was still extensive, but seemed healthy and healing. The pudendum, viewed without interference by the hand, was quite healthy.

CASE 5. *Lupus hypertrophicus, under observation above five years; both labia majora enlarged; polypoid growth on right labium; perineum and anus affected; nodules at orifice of vagina with stricture of it.*—M. L—, æt. 29, was admitted into Martha Ward on October 13th; has been married ten years; no children at full time; three miscarriages about third month, the last miscarriage two years ago. Catamenia began at thirteen years of age, have never been regular, intervals varying from fourteen to twenty-eight days.

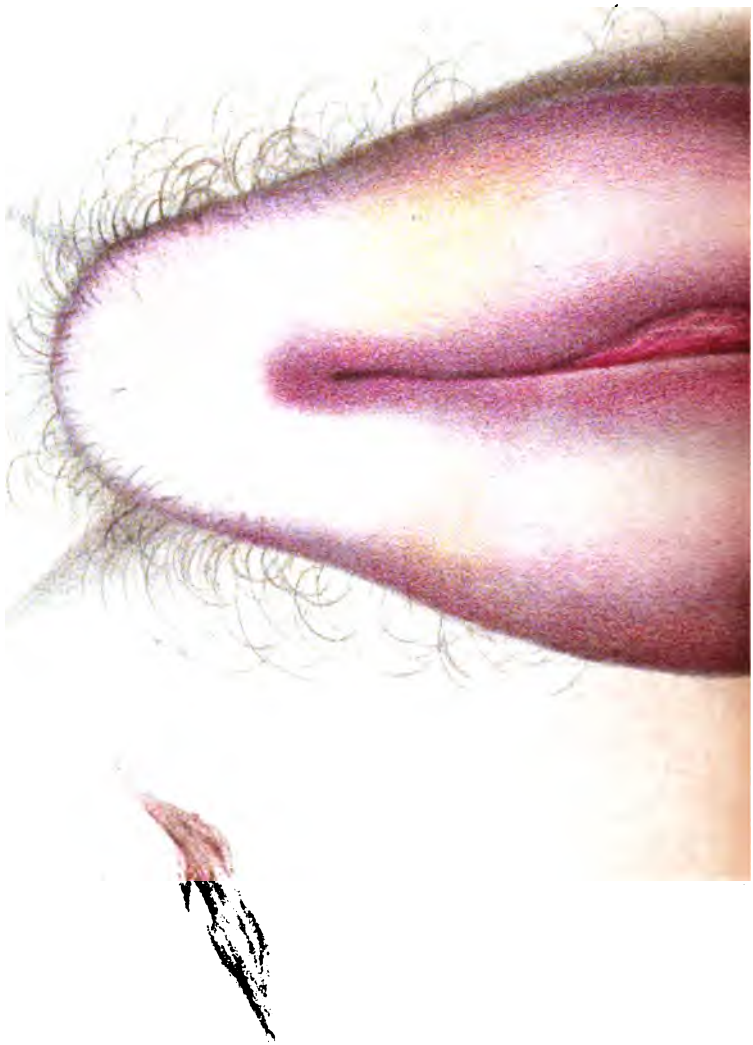
Five years ago was in Martha Ward under Dr. Greenhalgh, suffering from hypertrophy of the clitoris and labia majora, the parts being extremely sensitive. The growths were removed by écraseur, and she made a good recovery.

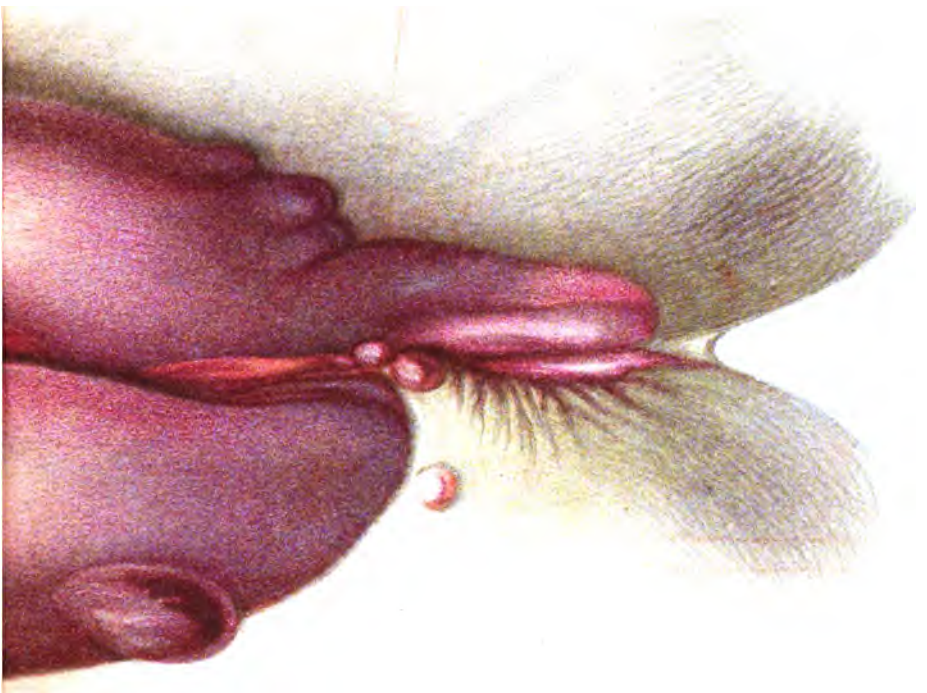
For two years after this she remained well, observing no enlargement returning. But then discharge began, at first thin, afterwards thick and yellow, and the labia increased in bulk. At times she has had some bleeding, and she has had throbbing pain in the pudendum.

Her general health is good. Bowels are said to be loose, being opened three times daily. The inguinal glands are not enlarged. Both thighs much marked with venosity. On the inside of the right thigh, three inches below the vulva, is a brownish red rounded hard spot, little less than a sixpence. Several similar spots are observed on the hips and some of the smaller have pustule-like eminences. The labia majora are much hypertrophied, indurated, purplish red; their posterior terminal piers elongated (Plate XII; drawing by Mr. Godart). They are not sensitive. On the outer side of the right labium majus, about an inch from its posterior extremity, is a somewhat polypoid outgrowth, as large as a big field-bean. At the posterior extremity of the left labium majus are some nodular almost polypoid projections. A projecting thick mass, in continuation of the left labium, connects it with the anus, passing along the perineum. There is a similar but much smaller crest-like mass on the right side. On the left thigh, and concealed by the labium, is a similar wart-like mass. On separating the labia, there is found a large fenestrated nodule, the hypertrophied right half of the preputium clitoridis. The os vaginæ is hidden by pale red nodules arranged around it, and it is strictured so as scarcely to admit a finger. As seen through the speculum the vagina is healthy, but contains a little pus. On the inside of the left labium are two small ulcerations, one superficial, the other deeper and sharp-edged. The rectum examined by the finger is very tender, and the finger does not get beyond a region of ill-defined hardness. Seen through the speculum its mucous membrane is red and injected. The bladder as examined by sound is healthy, not tender, measuring from orifice of urethra four inches and a quarter.

On October 16th the posterior half of the right labium

PLATE XII CASE V





West Newman & Co. ch

was removed by galvanic cautery; and, the platinum wire breaking, the operation was completed by écraseur and scalpel. The ulcerated posterior part of the left labium was removed by knife. The wounds were washed with solution of chloride of zinc (30 grains to an ounce), and oozing checked by dry perchloride of iron.

October 23rd.—The wounds are healing well with carbolic oil dressing.

25th.—Gout affects the great toe and knee on the right side (had an attack in February which lasted six weeks).

November 11th.—She is discharged, refusing to have any further operative treatment.

APPENDIX.

CASE 6. *Of syphilitic lupus of pudendum; history of syphilitic infection; peculiar leaden tint of affected parts; scar-like condition of large areas of skin; alopecia of parts of pubes; hypertrophy of prepuce of clitoris; partial disappearance or destruction of nymphæ; hypertrophy of orifice of urethra with superficial ulceration, &c.*—E. S—, æt. 24, was admitted into Martha Ward, June 3rd, 1885; unmarried; has had no children, but states that she had a miscarriage at the sixth month about six months ago. Catamenia commenced at twelve years of age and have been irregular, but now recur naturally. Since a large loss of blood about two years ago has been unable to retain urine as before.

She says she has not had a sore. Five years ago she suffered from sore-throat; eighteen months ago had a brown eruption on her back, which disappeared under treatment. At various times has had lumps in the neck and groin.

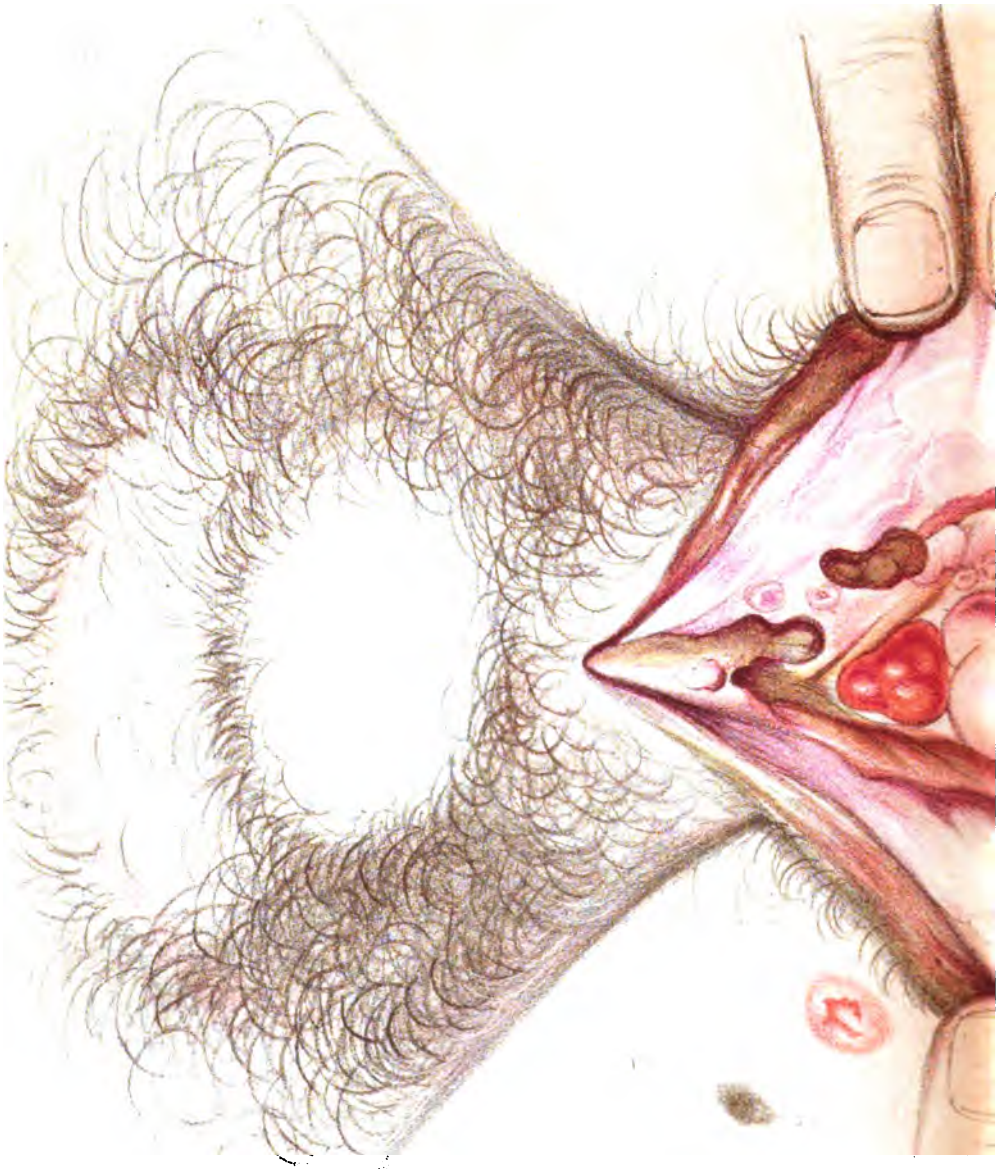
She is a well-nourished woman, of muddy complexion. Has no pain; pulse and temperature natural; at present has control over her urination as usual. Has a copious thin purulent vaginal discharge.

Axillary glands, and some glands behind both sterno-

mastoids, are enlarged and slightly tender. The skin of the abdomen, back, and body generally, appears healthy. Inguinal glands and lymphatics on both sides enlarged and indurated. The mons veneris is the seat of a scar-like surface denuded of hair except in a line across its middle (Plate XIII; drawing by Mr. Godart). The inner side of the hips on each side of the anus, and on the left for three inches behind it, are the seat of scar-like skin; and here especially the skin has a peculiar leaden brown hue. Around the anus are numerous small folds, and on the right is a small growth the size of a pea. The anus is very tender, and the finger penetrating finds this part of the gut for an inch and a half tender, contracted, indurated and roughened, and bleeding on examination; it is not inspected visually. On the right thigh, about an inch and a half from the labium, is a small lump, and beneath it a rounded red button, of the size of a sixpence, ulcerated in the centre. On the inside of the left labium are some remains of the corresponding nympha. The right nympha has entirely disappeared, unless a small fold reaching within a quarter of an inch of the urethra be taken as representing it. On this fold is a projecting little growth. The prepuce of the clitoris is considerably hypertrophied. The right half of the hymen is much thickened and hypertrophied, not inflamed. The whole urethra is hypertrophied and prominent into vagina; its opening is not seen in consequence of its being obscured by a large caruncular red growth which is superficially ulcerated. The urethra is contracted and indurated, the ordinary catheter entering with difficulty and much pain, and with effusion of blood. The vagina is slightly inflamed and full of thin watery pus.

On June 10th the urethral caruncle and the other hypertrophies were removed by Paquelin's knife cautery. On the 27th all was found healed and the appearances as nearly healthy as might be. The hypertrophied urethra remains, and some portions of hymen. The secretion of pus from the vagina has ceased. Dismissed.

PLATE XIII. CASE VI.



West, Newman & Co. imp.

Mr. HUTCHINSON said that he rose in response to the President's invitation, although he had come rather to listen than to speak. He considered Dr. Matthews Duncan's paper a very valuable contribution to our clinical knowledge of a disease in which he had himself taken much interest. The narratives were clear and full, and the coloured drawings which illustrated the cases made them so complete as to give the members of the Society almost the advantage of having seen the patients. He might as well at once avow that a careful perusal of Dr. Duncan's paper (before the meeting), and an examination of the portraits, had led him to form an opinion somewhat different from that which the author had expressed. He felt it to be almost an impertinence to differ from one of Dr. Matthews Duncan's well-known clinical acumen, especially since he alone had actually examined the patients. He felt bound, however, in the interests of clinical accuracy, to question the diagnosis, and he did so with the more freedom because he well knew that there was no one more willing than Dr. Matthews Duncan to court the investigation of his facts. In the first place, he felt tolerably confident that all dermatologists would repudiate the name lupus as inapplicable to the disease described; and in the next, he could not help a very strong suspicion that, in all the six patients whose cases had been just narrated, the disease was remotely connected with syphilis. He expressed some surprise that Dr. Duncan had not attempted in any of the cases to show that syphilis was probably absent, and that he had indeed left it for the most part unmentioned. Having stated of the whole set of drawings that, so far as they went, he (Mr. Hutchinson) should have assumed that they were all representations of tertiary syphilis, unless that belief were entirely confuted by the case-narratives, he next proceeded to examine the latter, and he took each case *seriatim*, and showed that Dr. Duncan had recorded facts concerning all the women which were very suspicious. Thus, in one, it was acknowledged that there was a suspicion of syphilis; another had sores, discharge, and a bubo a few years before; and so on; all were married women, and all were hospital patients of a class in which syphilis was very common. It must be remembered that the female genitals, when affected in tertiary syphilis, were liable to display some peculiar forms of morbid action. Chronic gonorrhœa very often complicated syphilis in women; and, as a consequence of the long-continued irritation of discharges, the clitoris, nymphæ, and labia often became first œdematous and then hypertrophied. These were the conditions which Dr. Duncan's portraits showed. Although they were not all alike, most of them exhibited a combination of elephantoid hypertrophy, with ulceration and the formation of scars. There was, perhaps, nothing that deserved the name of elephantiasis, but there was an approach to it; and, for his part, he believed that the differ-

ence was only a matter of degree. In reference to lupus, Mr. Hutchinson stated that he did not believe he had more than once or twice seen true lupus, that is, such lupus as we are all familiar with on the face and other parts, on the vulva; and he thought it would be a great pity if these cases were placed on permament record under that name. Not only did their local features differ widely from common lupus, but in not one of them was it recorded that lupus was coincidently present on other parts of the body. In Dr. Duncan's former paper he believed that one case had been recorded in which common lupus occurred on the patient's nose, and this was held to be important proof as to the nature of the disease of the vulva. In this instance, however, the narrative mentioned that there was perforation of the palate, a condition known to be infinitely rare in lupus, but very common in syphilis. He should be very much interested in what Dr. Duncan could say as to the exclusion of syphilis in his patients,—whether, for instance, he had met with the disease under circumstances in which it was highly improbable that syphilis existed. Such improbability had not been made out, and he thought it had not even been attempted in the paper to which they had listened. As regards measures of treatment, he was entirely at one with Dr. Duncan, and warmly congratulated him on the success which had attended excision and free cauterization of parts. He could not help suspecting that a source of fallacy had existed here as regards syphilis, and that it had been assumed that diseases which were more successfully treated by local measures than internal specifics were probably not syphilitic. He had, however, if he might be permitted to express a personal opinion, long held that not a few of the tertiary manifestations of syphilis yielded much more readily to local cauterisation than they did to mercury or iodide of potassium. He felt compelled, therefore, to believe, at any rate until further negative evidence was produced, that Dr. Duncan's patients were the subjects of remote syphilitic taint, and that their local disease was partly due to it, and in part to local irritation. If the term "lupus" was to be used in connection with them at all, it ought certainly, he thought, to be used with the prefix "syphilitic."

Dr. PLAYFAIR said that he was encouraged by Mr. Hutchinson's valuable observations to admit, what he might otherwise perhaps have judiciously concealed, that when he saw the title of Dr. Duncan's paper, he did not understand what lupus of the vulva meant, and that he came to the Society principally for the purpose of gaining information on the subject. It was obvious, however, that he need not have felt so ashamed of his ignorance, since a dermatologist of Mr. Hutchinson's eminence evidently shared it. When he heard Dr. Duncan say he had never seen a case of elephantiasis of the vulva he was much surprised, for he thought he had seen many, but the mystery was cleared up when

he inspected Dr. Duncan's drawings, which portrayed conditions very familiar to him, which he had always been in the habit of describing as elephantiasis. Having no pretensions to skill as a dermatologist he might very possibly have been calling a well-known disease by a wrong name, but the mistake at any rate was not a very bad one, since Mr. Hutchinson deliberately held to the opinion that these drawings illustrated "elephantiasis," and were not at all like what dermatologists describe as "lupus." In the early part of his career in India he had seen many cases of elephantiasis of the scrotum. Some, but not all of these, in appearance, and every other clinical point, were quite indistinguishable from Dr. Duncan's cases. The treatment he had always adopted for both was the same Dr. Duncan used, viz. free excision of the diseased part. It was perfectly obvious, therefore, that the disease is not new, but it is very well known, and that what Dr. Duncan had chiefly done was to fit to it a new name, the suitability of which was at any rate open to criticism.

Dr. GALABIN asked whether Dr. Matthews Duncan could give any information with respect to the histology of the hypertrophies described by him, not only in relation to syphilitic hypertrophies, but to new growths. He asked especially in reference to a case mentioned by Dr. Duncan in his former paper on the ulcerations of lupus as an instance of that disease in the body of the uterus, leading to perforation into the peritoneal cavity. The specimen, brought before the Society on a former occasion by Dr. Duncan, showed considerable hypertrophy as well as ulceration. He believed that the word lupus was not mentioned at the time, but that it was stated, on the authority of Dr. Thin, that there was merely infiltration with inflammatory cells, although clinically the case ran the course of one of malignant disease. By Dr. Duncan's kindness he had the opportunity of making a microscopic examination, and had thought that, although in general there was merely infiltration with leucocytes, yet, in some parts, the cells were joined by processes, so that the structure approximated to that of a new growth. Like Dr. Playfair, he had hitherto regarded lupus of the female genitals as being, in his experience, a very rare disease. But he had met, not very unfrequently, with hypertrophies similar to some of those shown in Dr. Duncan's drawings, and had regarded them as being the sequel of syphilis, of the previous occurrence of which disease he had generally found some evidence. He had found anti-syphilitic remedies by themselves of no avail in such cases, but had always treated them, with favorable results, by free amputation or excision, in combination with the administration of perchloride of mercury internally.

Dr. THIN had examined microscopically tissue removed from a number of Dr. Duncan's cases, and found the histological con-

dition to be uniform in character in all of them. The growths consisted of fibrous tissue in various stages of development. The mucous membrane was either found entire or partially disintegrated according as there was no ulceration or as ulceration was impending. In all the cases there was more or less small-cell infiltration immediately under the epithelium, and a number of blood-vessels ran from below straight to the epithelium until they were almost in direct contact with it. There were no marked inflammatory changes in the fibrous tissue, which was found in all stages of development. In some parts newly-formed connective-tissue cells were numerous in the midst of a tissue only partially formed, and in the same section at other parts the fibrous tissue was found in successive stages of development reaching to the fully developed stage. The characteristic appearances of lupus vulgaris were not present, and histologically the fibrous tissue growth could not be confounded with the changes found in that disease, nor were the appearances found in syphilitic gummæ present. There was no disease of blood-vessels or sclerosed fibrous tissue or acute inflammatory infiltration in the centre of the hypertrophied tissue. Carcinoma could be definitely excluded by the microscopical examination. In so far as there was a development of fibrous tissue there was some analogy with the condition found in elephantiasis arabum, but the limited development, the inflammatory infiltration found under the epithelium, and the tendency to breaking down, were sufficient to distinguish the affection in question from that disease. The appearances led him to infer that some source of irritation acting peripherally and persistently caused an effusion of plastic material from the vessels, and that the same morbid influence, whatever it might be, prevented the organization taking place in a completely normal manner. Dr. Thin had been favoured by letters on the subject from M. Vidal, of Paris, and Professor Kaposi, of Vienna. M. Vidal, in about 150 women affected with lupus vulgaris, had not seen the region of the vulva affected once. He had seen lymphangitis and tertiary syphilitic lesions of the vulva lead to a condition like elephantiasis, and considered that scrofulous and tuberculous gummæ produced similar appearances. He is familiar with a lesion beginning with intradermic or subdermic indurations (*gommes*), which leads to suppuration and intractable ulcerations and to the formation of holes, softenings, and fistulous tracts. He believes that these lesions are probably manifestations of local tuberculosis, and states that they are found in young and scrofulous women. Professor Kaposi had at a moderate computation seen twelve hundred cases of lupus vulgaris, and in women as often as in men, but he had not once seen lupus of the nates and thigh extend to the labia, nor had he ever seen isolated lupus of the labia and vulva. He had seen ulcerative conditions on the female genitals,

partly on the labia majora and extending from their outer to the inner surface; partly in the vestibulum vaginæ. These ulcers rest on a doughy but firm (*teigig-derber*) base, have sharply defined borders, and present a finely granular red surface which secretes a thin pus in moderate quantity. The border which is towards the skin is mostly the broader and thicker, often cauliflower-like (*grob-drusig-papillär*); the inner border (that on the side of the mucous membrane) is flatter and smaller. They are very chronic in their course, persisting months and years. It is easily understood how an ulcerated surface of this kind may be mistaken for either a primary or tertiary syphilitic gumma or carcinoma or tuberculosis of the skin, according as hardness, pain, or a serpiginous form of ulceration predominates, but it cannot be mistaken for lupus vulgaris. He had observed similar conditions rapidly develop on the back of the hand in persons who had abrasions contaminated by animal substances—in persons who had to do with horses and cows; in skinners and such like. Dr. Thin had had an opportunity of observing the disease clinically in some of Dr. Duncan's cases, and he had been convinced that this hypertrophic and ulcerative disease described by Dr. Duncan was an affection *sui generis*, and that it could be clinically diagnosed and distinguished from syphilis, lupus vulgaris, cancer, and elephantiasis. He could not agree with Mr. Hutchinson, because in the cases described there was no real evidence of secondary syphilis, but more particularly because the lesions themselves did not present the characteristic appearances of syphilis. As compared with syphilitic lesions the hypertrophy was out of all proportion to the ulceration, and the ulceration did not present the typical syphilitic character. There were neither the ulcerative, cicatricial, nor inflammatory appearances on whose combination we relied clinically for the diagnosis of syphilis. Still less could he understand how Dr. Playfair could confound these cases with tropical elephantiasis arabum; the disease now known to be caused by the obstruction of lymphatic vessels by *Filaria sanguinis hominis*. The conditions were in his experience entirely different.

Dr. West excused himself for speaking on the subject, on the ground that he believed that he was the first person in this country to describe, in his 'Lectures on the Diseases of Women,' some five and twenty years ago, the disease which is the subject of Dr. Duncan's paper. He would not venture to discuss the question of the name by which the affection would be most properly designated, since the light which the microscope has thrown on the intimate structure of morbid growths was far less distinct when he was connected with St. Bartholomew's Hospital than it is now. He is anxious, however, to say that in none of the cases which came under his observation was either he or Sir James Paget, to whose assistance he was often indebted, able to

discover any evidence of previous syphilitic infection. In most, if not all, of the cases (he spoke only from memory) iodide of potassium was given continuously and in large doses without any results. For these reasons he was compelled to dissent from the opinion of so eminent an authority as Mr. Jonathan Hutchinson that the so-called lupus of the vulva was nothing else than a form of tertiary syphilitic disease.

Dr. WILLIAM DUNCAN mentioned a large growth of both labia majora and minora with the clitoris which he removed from a patient two years ago, and which he exhibited at a meeting of the Obstetrical Society, when (if he remembered rightly) Dr. Mathews Duncan said he considered it a case of lupus. The patient had well-marked tertiary syphilis, and eighteen months after the operation again came under treatment for a recurrence of the growth in the position of the left labium majus; she was given large doses of iodide of potassium with perchloride of mercury, and at the present moment the growth has, presumably as a result of the treatment, practically disappeared.

Dr. HORROCKS asked whether the author of the paper, in using the word lupus, meant the same disease which was known to dermatologists as lupus vulgaris, or syphilis which manifested itself in a form resembling lupus, or a different disease to which he was applying the term lupus as a matter of convenience. Dr. Horrocks had hitherto regarded these cases as instances of syphilis, and mentioned a case in which he had removed an enormous mass growing on the labia. It had previously resisted local and internal antispecifics, but had rapidly healed after removal. He asked also whether the mere fact that these cases were so amenable to treatment by the knife or cautery, without tendency to recurrence, was not against the theory of their lupoid nature.

Mr. W. GANDY said the question of the syphilitic nature of this disease having been raised by Mr. Hutchinson, he should be glad to know from Dr. Duncan whether in the previous history of any of the interesting cases recorded he had been able to ascertain that there had been sore-throat, or copper-coloured eruption, or any other symptoms of constitutional syphilis.

Dr. GERVIS would like to know whether Mr. Hutchinson thought it possible for hereditary syphilis to lead to such growths as those under discussion.

Dr. MATTHEWS DUNCAN had made observations on this disease for more than twenty years, and had always done his best to exclude syphilis from what he adopted as characteristic cases. Mr. Hutchinson relied on the general appearances, the frequency of childbearing and vaginal discharges as evidences of syphilitic origin. Now everyone at first sight held the same view; but numerous syphilologists and dermatologists and others, here and elsewhere, among whom Paget, West, Thin, Kaposi,

Vidal, were mentioned this evening, had satisfied themselves that the disease was not of syphilitic origin. The disease was not new, though little understood. There was a great literature of the subject. He would regard himself as yielding to something like superstition if he entertained the notion of syphilitic origin of a disease occurring in children, in virgins, in all classes of society, confined generally to the genital organs, and occurring without a tittle of evidence of primary syphilitic infection, or of secondary or of tertiary syphilis. The disease had an appearance and history quite distinct from that of tertiary syphilis, and he would not insist farther on this point after the remarks of Drs. West and Thin. At all events he could not admit that outward appearances, childbearing, and vaginal discharges were evidence, not to speak of proof, of syphilitic origin. It was said by Dr. Playfair that it was elephantiasis, but it had no resemblance to that well-known disease in outward characters, nor in history, nor in histological characters. Mr. Hutchinson had said it was not lupus, and yet he held that it was a kind of syphilitic lupus. He (Dr. Matthews Duncan) had taken care, in a former paper and elsewhere, to point out that the disease, however much it resembled lupus in some points, was not lupus vulgaris. He had never seen that disease in the pudendum, and others much more experienced in general dermatology had never seen it there. He used the term lupus because it was the name generally given to the disease and because it was so much easier than esthiomène. He would soon have the honour to lay before the Society another paper on this disease, specially describing the inflammations attending it; and he hoped to be able to give a statement of the histological investigations of Dr. Thin, who, with several other histologists, had taken much trouble with the cases he had been describing. He would only now say that the histology of Huguier, Paget, and Thin lent no support to the theory of syphilitic origin.

NOVEMBER 4TH, 1885.

J. B. POTTER, M.D., President, in the Chair.

Present—43 Fellows and 4 visitors.

Books were presented by Dr. Wm. T. Lusk, Dr. Webb, and the Council of University College.

W. Radford Dakin, M.D., was admitted a Fellow of the Society.

J. Brice Bunny, L.R.C.P. Ed. (Newbury), was declared admitted.

The following gentlemen were elected Fellows of the Society:—Thomas Boyle, M.R.C.S. (Newquay); Thomas Hillier Chittenden, L.R.C.P. Lond. (Whitwell); Ogilvie Grant, M.D. Ed. (Inverness); Edward Ferdinand Grün, M.R.C.S. (Putney); Robert Alexander Jamieson, M.D. (Shanghai); Edmund Wilkinson Roughton, M.D.; and Albert Wilson, M.D. Ed. (Leytonstone).

The following gentleman was proposed for election:—Edgar T. Underhill, M.B. Ed. (Tipton).

BROAD LIGAMENT CYST WITH SEPTA.

DR. W. S. A. GRIFFITH exhibited a cyst of the left broad ligament, not parovarian, situated just below and internal to the fimbriated extremity of the tube, about three inches

in diameter, and containing several large thick septa, corresponding to the septa commonly found in multilocular ovarian cysts. It was a character only one degree short of multilocularity, which Dr. Griffith had never seen in broad ligament cysts nor had he found any description.

The wall contained no muscular layer, such as has been recently described in the 'Archiv f. Gyn., by Kilian.

Mr. ALBAN DORAN had only observed one multilocular, thin-walled broad ligament cyst, although he had examined several hundred uterine appendages. It was on the same side as a large ovarian tumour, with which it was entirely unconnected. Dr. Griffith's specimen was probably not parovarian. The question of plain muscular fibres in the cyst wall applied to cysts in general and in any part of the body, They were frequently detected in the walls of ovarian cysts.

CHANCRE ON THE CERVIX UTERI.

DR. HERMAN exhibited a drawing of what he believed to have been a chancre on the cervix uteri. The patient was aged 23, and had been married three months. There was a purulent discharge from the vagina, condylomata on the labia majora, an erythematous rash on the limbs and trunk, and superficial ulceration of the tonsils. When she came to the London Hospital on March 15th, 1885, the cervix uteri was enlarged and softened, and on its posterior lip was what looked like a greyish yellow slough, the size of a shilling, with an inflamed areola round it. She was admitted into the hospital on March 23rd, and when the drawing was made, on March 24th, the slough had partly fallen off. The patient was treated with mercury. On April 5th the granulating surface was only of the size of a pea, and soon afterwards completely healed. There was no enlargement of the inguinal glands. The reasons which led him to think that the sore on the cervix was a chancre were these. There was no doubt that the patient

West, Newman & Co. ch.

had secondary syphilis. No trace of a primary sore was found anywhere else, nor was any account of one given; and the absence of enlargement of the inguinal glands was against there having been a chancre on the vulva. The characters and course of the sore on the cervix were quite different from any kind of ulceration or erosion of the cervix that he had previously seen. The discharge from the cervical sore was inoculated on the patient's thigh, and produced only a small pustule, showing that it was not a soft chancre.

(In reply to Dr. Galabin) Dr. HERMAN said that he had not detected induration, but he thought that the cervix uteri was one of those places in which it would be very difficult to detect induration.

ON THE SUPPURATION AND DISCHARGE INTO MUCOUS CAVITIES OF DERMOID CYSTS OF THE PELVIS.

By G. Ernest Herman, M.B. Lond., F.R.C.P.,
OBSTETRIC PHYSICIAN TO THE LONDON HOSPITAL, AND LECTURER ON MIDWIFERY; HONORARY SECRETARY TO THE SOCIETY.

It is well known that dermoid cysts are prone to inflame and suppurate, that they may in consequence become extensively adherent, that they may burst into the peritoneum, externally, or into mucous cavities.

There can be no doubt that as a general rule the proper treatment of a pelvic dermoid cyst is its removal in the same manner as any other ovarian tumour, by abdominal section.

When a suppurated cyst has burst into the peritoneum, peritonitis is the consequence,* and the removal of the cause of the mischief by abdominal section is urgently called for.

I find no case on record in which a pelvic dermoid cyst has been proved to have opened into the bowel high up.† When a dermoid cyst has opened into the bladder, vagina, or rectum, the case presents special features. The tumour will be fixed in the pelvis by close, firm, and probably extensive adhesions; and pelvic adhesions are those which, in the removal of tumours by abdominal section, are the

* See a case reported by Salter, 'Guy's Hosp. Reports,' 3rd series, vol. vi, 1859, p. 511; a case reported by Bidder and Sutugin ('Klin. Bericht,' St. Petersburgh, 1874, S. 76), of double dermoid cyst, one having burst into the large intestine, the other bursting into the peritoneum; another by Kiwisch, 'Klin. Vorträge,' Bd. ii, S. 90, and another by Lomer, 'Arch. für Gyn.,' Bd. xix, S. 314.

† Atlee records a case of dermoid cyst bursting into the intestine, but there is nothing to show into what part of the bowel; and the tumour was situated in the lower abdomen ('Philadelphia Med. Times,' vol. xv, p. 675.)

most difficult to deal with. Although a very experienced and skilful operator may be able to overcome such difficulties, yet they cannot but add to the risk; and if the operator be not dexterous or experienced, the additional risk will be considerable. On the other hand one might expect that the suppuration of the cyst and discharge of its contents would be favorable to spontaneous cure.

Three such cases have been under my own care. This made it a matter of interest to me to ascertain what was the usual course of such cases. Most authors on diseases of women refer to the subject, but I have not been able to find any English author who has fully described the clinical history of this event from a basis of recorded cases, or whose account of its possible terminations is complete. I do not think it worth while to quote general statements or expressions of opinion, but have endeavoured to inform myself as to the results of the suppuration of dermoid cysts by collecting all the cases I could find.

The questions which I propose to consider, in the light of recorded cases, are these:—When a pelvic dermoid cyst suppurates and bursts into a mucous tract what may be the course of such a case? What prospect of cure does this event offer? Is this cure complete? How can the cure be best assisted by treatment?

A. When the cyst is small it may become protruded into the viscus, become polypoid, and be expelled, or be removed with ease by the surgeon.

A case described by Blich* demonstrates that the tumour may become polypoid. The patient was unmarried, and aged twenty-three, when, while menstruating, she was suddenly seized with symptoms of acute cystitis, the urine becoming purulent and bloody, with febrile symptoms. After two or three weeks' illness, concretions which contained hairs were passed in the urine. For about a year similar concretions were passed almost daily, and then ceased to be passed. The bladder was examined, but no calculus found. Five years after the beginning of

* 'Schmidt's Jahrbuch,' Bd. 150, S. 296.

the symptoms she was examined under anæsthesia, and a swelling discovered between the uterus and bladder. Her pain and other symptoms continued, the pain being only relieved by opium, of which she took enormous quantities, 240 grains of liquid and 30 grains of solid opium per week. Gradual wasting and cachexia supervened, and she died nineteen years after the first onset of the symptoms. On post-mortem examination, a tumour the size of a walnut, with a thick stalk, was found in the bladder. Its covering was like altered mucous membrane. On the stalk and around it were fine hairs. On section the tumour was firm, with a bone-like nucleus in the middle. It was microscopically examined by Winge, who found sweat-glands in its covering, and that the apparently bony nucleus was a tooth. The explanation suggested by Blich and Winge is that the cyst was originally ovarian, had discharged into the bladder, and then possibly under the influence of contraction of the bladder had become turned inside out. The cyst was regarded as originally ovarian because there was a band uniting the ovary with the stalk of the tumour.

This case demonstrates that a dermoid cyst may become turned inside out and become polypoid.

The next case I quote shows that such a tumour may be separated and expelled.

Gluge* describes a tumour spontaneously discharged per urethram by an unmarried patient aged thirty. The first symptom noticed was vesical tenesmus, with the presence of clots of blood and sediment in the urine, but no pus. The belly swelled, was tense and painful. Then came retention of urine, which was drawn off with catheter, and contained neither blood nor pus. On the third day the abdominal pain was less, and the uriue was passed naturally, but a feeling of pressure in the urethra was complained of. In the afternoon the urethral pain became very severe, and the cyst was passed. It was egg-shaped, and measured 3 by 4·5 centimetres. It was covered with

* 'Schmidt's Jahrbuch,' Bd. 149, p. 175.

cutis producing hairs, and contained bony fragments like cement.

The foregoing case was quite unusual, in that the cyst was spontaneously separated and expelled; it is the only one of the kind that I can find.

There are others in which the same process has been going on, but has been completed by the help of the surgeon. Mr. Bryant mentions the following case in his work on surgery.*

A lady, aged 30, who had had two children, had never before had any bladder irritability. She was seized with acute bladder symptoms, which were relieved by the discharge of a mass of fine hair. Subsequently a quantity of hair covered with phosphates was discharged, and also small calculi. Later on the bladder symptoms recurred. Four months after the first onset of symptoms the bladder was explored, and a polypoid outgrowth springing from its fundus detected, the growth being covered with hair. It was an inch and a half long, and its pedicle came out of a kind of annular depression in the wall of the bladder. This was ligatured and excised. About a month after, symptoms returned. The bladder was a second time explored, and a growth as large as an unshelled almond removed by evulsion. After the operation the annular ring noticed was very distinct, and into it the finger could be passed with ease; but it was thought well not to be too anxious as to where it led. Rapid and complete recovery took place. Mr. Bryant says, "I believe this tumour to have originated from a dermoid cyst. It acutely inflamed, opened into the bladder, then began to turn inside out, and from the expulsive action of the bladder to become polypoid."

In this case the inversion of the cyst took place spontaneously, and the inverted cyst was removed by the surgeon. I next quote a case in which the cyst was inverted by the surgeon.

Delpech† records this case, which is of remarkable

* 'Practice of Surgery,' 4th edition, 1884, vol. ii, p. 79.

† 'Chirurgie clinique de Montpellier,' 1828, Tome ii, p. 521.

interest, as exemplifying the cure of a dermoid cyst in this manner. His patient was aged 27. She was married at twenty-three, and had good health until the second month of her second pregnancy, when she began to be troubled with vesical tenesmus. The mother of the patient examined her, and drew out from the urethra a solid body, which she said was like a fish-bone. This was followed by relief, and the patient throughout her pregnancy had no further trouble. Soon after delivery she again began to suffer from similar symptoms. Her husband examined her, and with a piece of brass wire bent into the shape of a hook, fished out some hair per urethram. This manœuvre was several times repeated by him and by a surgeon, who discovered a vesical calculus. After this she came under the care of Delpech. She was then suffering from urinary symptoms with hectic fever. The urine was fœtid, sanguinolent, and contained hair. Between the uterus and the bladder there was a tumour the size of an egg, soft and œdematous to the feel. A director was passed into the urethra, and with the "lithotome caché," the urethra was incised along its superior wall, thus making the canal large enough to admit the finger. The finger was put into the bladder, and the stone and a mass of hair, rendered thick and hard by incrustations, removed. The hair was felt to emerge from an opening at the right and posterior part of the bladder, with thick, hard, round borders, but too small, while it was partly filled up with the hair, to admit the finger. When the hair had been pulled out, the finger was inserted. The withdrawal of the finger was followed by a profuse discharge of pus, and, to the surprise of the operator, the tumour became inverted into the bladder, so that it projected, and acquired a distinct neck, around which a ligature might have been put. This was not done, because the necessary instruments were not at hand. Six days afterwards the ligature was applied through the dilated urethra. The tumour and ligature fell off on the fifth day. On examination it was found that the ligature

had only destroyed the summit of the cyst, a hole being left, into which the finger went. At the opposite side of the cavity into which the finger was thus inserted a second hole was found, leading into a further cavity, the boundary of which the finger could not reach. After this the cavities were washed out with tepid water night and morning. Seven weeks afterwards the urinary pains became again severe, and some more hair was removed. Four months after this, symptoms, which had never entirely disappeared, again became pressing. A mass of hair was found as before projecting from the opening into the cyst. A good deal was removed, but there was considerable resistance to its entire removal, and the result of the traction exercised on it was that the tissue from which the hair grew was dragged through the opening, detached, and removed. It was found to contain in its middle, surrounded by soft tissue, a piece of bone, implanted in which was a tooth. The cavity from which this had come was examined with the finger, and found quite empty. (Delpech says that the cavity was in the uterus; but he does not give such particulars of the steps he took to ascertain the situation of the cyst as to make it appear impossible for him to have been mistaken in this.) After this all symptoms disappeared, and the patient rapidly got well.

The cases I next quote are examples of tumour becoming partly expelled *through the rectum*, and the process being completed by the surgeon.

Irwin* reports the following case :—The patient, aged 50, had had seven children. She had been ill for nine years with lumbar and rectal pains, constipation, alternating with diarrhœa, and discharge of blood and mucus from the rectum; when going to stool she had had to introduce her finger and push away some resisting body which obstructed the bowel. Dr. Irwin tried to extract this body, and pulled it through the anus, but found it stopped by a fold of mucous membrane which embraced it

* 'Dublin Med. Press,' Jan. 25, 1843.

tightly round the centre, where the mass appeared narrowed by a circular contraction. This was divided by the scalpel, and the mass removed unbroken. It was a tumour the size of an orange, consisting chiefly of hair matted together by ammoniaco-magnesian phosphates, biliary matter, vegetable detritus, bones, and teeth. The patient remained quite well and free from disease or inconvenience in the rectum.

Bouchacourt* relates an essentially similar instance. A child, aged $5\frac{1}{2}$, was very costive, and one day passed pus per anum. This went on for seven months. Patient wasted, became dull and low-spirited, and had much abdominal pain. Fifteen days after the first escape of pus, and subsequently, locks of hair were passed. Seven months after the suppuration was observed the patient was seized with tenesmus and a sense of a foreign body in the anus. A tumour was found adherent by a pedicle to the wall of the rectum, and was expelled. A ligature was put round it to prevent hæmorrhage, and the child was cured. The tumour contained hair, bone, and teeth inside it.†

The fortunate termination of these cases suggests that in similar instances the surgeon might attempt to imitate the course of events in Delpech's case. From this point of view a case reported by Waelle‡ is important, in which the signs and symptoms were nearly identical with the just-mentioned cases, and the removal of the projecting part of the tumour was accomplished. This, however, formed only a portion of it, the peritoneum was torn, and the result was not favorable.

The patient at the age of twenty-three had a febrile

* 'Gazette Médicale de Paris,' 1850, p. 635.

† Mr. Harrison Cripps, in his work on diseases of the rectum (1884, p. 277) quotes two cases of dermoid polypus of the rectum. He speculates that they may be allied to congenital coccygeal tumours, and there is nothing in the history of the cases to lead to the belief that they had arisen by the inversion of a cystic tumour; but the cases above related make such an explanation a plausible one.

‡ 'Ueber die Perforation der Blase durch dermoid Kystome des Ovariums,' Leipzig, 1881.

illness, with blood in the urine, and from this date urinary symptoms continued. At the age of twenty-five and again two years after she was delivered of children, each time after a normal labour. When twenty-eight, fat appeared in the urine, and pain got worse. A tumour the size of an egg was felt in the anterior vaginal wall, attached to the bladder, and tender. The urethra was dilated, and a tumour the size of a walnut found, springing from the posterior wall of the bladder. On this a tooth was implanted, which was detached and extracted. This was followed by considerable bleeding, so the tumour was removed by shelling it out with the finger, which was easily done. No perforation of the bladder was perceived. The patient died next day. On autopsy, old and recent peritonitis was found, the recent inflammation starting from a split in the peritoneum made during the operation. A tumour the size of a hen's egg was found in the left vesico-uterine fossa, multilocular, containing teeth, and attached to the left ovary.

The foregoing cases are all that I can find which illustrate the cure of dermoid cysts by inversion. I pass now to another termination.

B. Dermoid cysts may open into mucous cavities, empty themselves, or be emptied by the surgeon, close, and complete cure result.

I think it important to invite attention to this, because it appears to be matter of common belief that a suppurated dermoid cyst will never heal so long as a bit of dermoid tissue remains in the wall of the suppurating cavity. This belief seems to rest, so far as I can find, upon a case recorded by Sir W. Lawrence* of cyst in the orbit, which was partly removed, but did not heal; it sometimes scabbed over and sometimes discharged. An incision was made, and closely adhering to the frontal bone was found a small strip of cyst, with a white glistening surface, and a few short hairs on it. This was removed, and cicatrization followed.

* 'Diseases of the Eye,' edited by Hays, 1847, p. 163.

Whether it be the case or not that a bit of dermoid tissue inside a cyst will, independent of other conditions, continually prevent it from healing, I find so many cases in which emptying of the cyst has been followed by a practical cure, that is, by complete, and so far as the case has been followed, permanent, cessation of symptoms, that I think we may hold either that Sir W. Lawrence's generalization does not hold good of all cases, or else that it is the rule for the process of suppuration so to alter the condition of the interior of the cyst that its contraction and closure follows when it has been emptied.

The suppurated cyst may burst into the vagina, bladder, rectum, or externally.

It will be clear that when a pelvic cyst has burst *through the abdominal wall* the conditions will be less favorable to its closure than if it had opened at a point nearer its place of origin. I do not propose here to discuss the treatment of cases not opening into mucous cavities, but in illustration of the above remark I may quote the following case. It is recorded by Bernutz, who, like Lawrence, urges the necessity of extirpating every vestige of the cyst wall.* So far as his opinion is based upon his own experience, it appears to rest upon this case.†

The patient, aged 31, noticed a painful tumour in the right iliac region after her first confinement, when aged 24. It was at first stationary, and caused no trouble for five years after its discovery. After the birth of her second child, when aged 30, pain in the region of the tumour became acute, and was aggravated at the menstrual period, and the tumour enlarged. The patient had been confined to her bed for a month before coming under the care of Bernutz. He repeatedly punctured the cyst through the abdominal wall with the aspirator, but the patient's pyrexia continued, and therefore a free opening was made by cauterization of the skin with Vienna paste, and the cyst explored. Fatty matter,

* 'Archives de Tocologie,' 1876, p. 589.

† Op. cit., p. 577.

with hair, escaped. The cyst was more than once washed out with water and then with ether, to dissolve the fatty matter. Eight days after the opening of the cyst the patient suffered from an abscess over the sacrum; but there is nothing in the account given to show that this had anything to do with the cyst. Three months after the opening of the cyst, it had not closed, and therefore Tr. Iodi was injected. Six months afterwards a small sinus was still open.

Here there were clearly present mechanical conditions, viz. the attachment of the cyst at one point in the pelvis, and at another to the abdominal wall, which would tend to hinder the closure of the cyst. In similar or allied mechanical conditions it is common for sinuses left by ordinary abscesses or cysts not dermoid to remain long open. And as dermoid cysts, under favorable conditions, may close, I do not think this case proves the necessity of extirpating every vestige of the cyst.

A case recorded by Laflize* shows that a dermoid cyst which has been emptied through the abdominal wall may close. It is that of a girl aged 18, who had an indolent tumour in the left lateral and posterior part of the abdomen. An eschar was made over it with caustic, and pus mixed with fat let out. Subsequently, solid masses containing bones and teeth, and balls of hair, were extracted. Two months after the extraction of the last solid body the wound had perfectly closed.

The most favorable place for a suppurated pelvic cyst to open will plainly be *the vagina*. The point of opening being near the place of origin, the mechanical conditions will be favorable to the contraction of the cyst. If bursting have taken place into bladder or rectum, urine, fæces, or gas, may get into the cyst and hinder its closure, either mechanically by pressure, or by their irritant effect; and the movements of the muscular tissue around the opening will prevent the part being kept in

* 'Journal de Médecine, Chirurgie, et Pharmacie,' Paris, 1792, T. xci, p. 801.

the state of rest which is advantageous for natural cure. There is nothing of this kind to hinder closure in the case of an opening into the vagina. In two cases under my care, which I now relate, the opening was into this canal.

CASE 1.—*Suppurating dermoid cyst with pelvic hæmatocele; discharge of hæmatocele through rectum, and of cyst contents through vagina; contraction and closure of cyst.*

(From notes by Mr. A. K. GALE, Clinical Clerk, and Dr. FENTON-JONES, Resident Accoucheur.)

S. L—, æt. 34, was admitted into the London Hospital August 25th, 1881.

History.—She first menstruated at the age of fourteen, and was regular until her marriage, which took place when she was twenty-two. The flow was moderate in quantity, lasted five or six days, and was attended with only slight pain. Before her marriage she was first a dressmaker, then a servant. She had had five children. The first four labours were all good ones, the fourth being especially easy, the patient being in "real labour" only a quarter of an hour. Between the births of the second and third children she suffered from pain in the back and left iliac region, and used to think the left side of the abdomen larger than the other. A month after the birth of the third child she suffered from an illness which was called "bilious fever;" it lasted a week and was attended with much vomiting.

The last labour was in January, 1880. She was attended by Mr. Roland D. Smith, of Clapton, and Dr. C. T. Aveling, of Clapton, and by these gentlemen delivery was with much difficulty effected by forceps, the child being stillborn. Mr. Roland Smith tells me that neither he nor Dr. Aveling noticed any tumour. After her confinement the patient suffered from "inflammation of the womb," which kept her in bed for six weeks; and it was not till two months afterwards that she thought herself well. For a year or so after the confinement, however,

she suffered from pain in the left iliac region, brought on by exertion, and relieved by lying down.

With the exceptions mentioned, she was quite well until three weeks before admission. She was then, after slight exertion, seized suddenly with a violent pain in the lower abdomen, sickness, faintness, and collapse; and afterwards febrile symptoms, thirst, &c. She kept her bed for a week, and then got up, when the same symptoms recurred, obliging her to go to bed again. During this illness she had some pain and difficulty in defæcation.

On admission, she was fairly well nourished, and only slightly anæmic. There was a rounded swelling rising out of the pelvis, and reaching halfway between pubes and umbilicus. Transversely it reached from one iliac spine to the other. Per vaginam, the pelvis was found occupied by a swelling so that there was scarcely room for the finger to pass between it and the symphysis pubis. The uterus was in front of the tumour, and so high up as to be out of reach of the finger. The swelling reached downwards to within two inches of the vulva; it was rounded, but fluctuation could not be perceived. The recto-vaginal septum bulged forwards and was slightly œdematous. There were some external hæmorrhoids.

August 30th and 31st.—A quantity of blood-clot was passed per rectum. After this she felt much better, and could pass urine more freely. Temperature was lower and appetite better. The mass felt per vaginam was smaller and softer.

September 6th.—A gush of pus took place per vaginam. On examination an opening was felt in the posterior vaginal wall, and through this about a foot of india-rubber drainage-tubing was introduced. During the day following this much blood-stained pus escaped. The temperature became lower and the patient felt much relieved.

16th.—Fœtid discharge in large quantities had since the date of the last note been pouring from the drainage-tube, but the swelling was not much smaller.

28th.—The swelling was less. The drainage-tube was

changed, and offensive, sticky, white material found clinging to it. Temperature since the pus began to escape had fluctuated between 98° and 101.° The patient took her food well and slept well.

30th.—Some hair was discovered in the vagina, and on this being removed some teeth and bone came away, together with offensive discharge.

October 1st.—The opening into the cavity was enlarged, in order to give free exit to any similar cyst contents that might remain. The opening was kept patent, as before, with a drainage-tube.

10th.—The temperature was now normal, and the appetite good. The patient had no pain. The discharge was less in quantity, thin, of a yellowish colour, and not offensive. Shortly after this date the drainage-tube was removed.

22nd.—The patient was allowed to get up.

27th.—She said she felt well except for aching in her back and bearing-down pain when walking. The swelling was found to have diminished to about the apparent size of a Barcelona nut. The orifice was still open, and the sound entered it for about an inch and a half; but the finger could not be introduced. The patient was discharged.

November, 1883.—Through the kindness of Mr. Roland Smith I saw the patient. She looked in good health, and said she felt quite well. Behind and slightly to the left of the uterus was a round swelling of the size of a small plum. With a speculum a depressed cicatrix was seen on it, but not even with a fine lachrymal probe could any opening be found.

This case may fairly be called an instance of complete cure, by emptying, contraction, and closure of the cyst.

CASE 2. *Dermoid cyst, suppurating, obstructing the bowel by its pressure and opening into the vagina; incision and emptying of cyst.*

(From notes by Mr. JOHN JAMES, Clinical Clerk, and Dr. A. J. RICHARDSON Resident Accoucheur.)

J. S—, æt. 24, admitted into the London Hospital January 12th, 1884, complaining of pain in the lower abdomen, and vomiting.

History.—She had always had good health, with the exception of an attack of smallpox six years ago. Began to menstruate at sixteen, and was always regular, the flow being profuse and without pain. She was married at twenty-one, and had had two children, both born without medical assistance. The last child was born seven weeks before admission. She had suffered ever since from continually increasing pain in the lower abdomen. For a week previous to admission the bowel had not been relieved, and vomiting had been persistent.

On admission there was found a large globular swelling behind the uterus, pressing so far backwards that the finger introduced per rectum could not be got past it. With one finger in the vagina and another in the rectum, fluctuation could be felt. The posterior lip of the cervix seemed continuous with the swelling. The cervix uteri was fixed, and pushed forwards against the pubes; and the sound passed upwards and forwards.

The aspirator trocar was put into the swelling and sixteen ounces of thick pus removed. An enema was then given by means of a catheter passed beyond the swelling, and the bowels were freely open; but the vomiting did not cease until thirty hours after the aspiration. The temperature, which on admission was 103°, came down within the next three days.

January 15th.—The uterus was now nearly in the normal position, but fixed by swelling around and behind it. There was tenderness all over the lower abdomen.

18th.—No return of the vomiting. Bowels open; patient sleeps and eats well.

February 1st.—The swelling had nearly regained the size it had on admission. It was freely incised with a bistoury, and a drainage-tube put in.

5th.—On removal of the drainage-tube a considerable quantity of closely packed hair was discovered in the neighbourhood of the orifice, and removed. An irregularly conical mass, about an inch and a half long by an inch broad at its base, its surface resembling epidermis, and having hairs growing on it, on section appearing composed of fat and fibrous tissue, was also removed.

March 10th.—Probe passed about two inches into the cyst, slight purulent discharge.

21st.—Uterus still fixed, but in normal position. A tender hard spot high up and to the right. Sound passes into cyst for two inches. Patient was discharged.

She subsequently attended for two or three months as an out-patient. She did not complain of any troublesome symptoms, and therefore was not examined. She then ceased to attend, and inquiry has failed to trace her. But the case may, I think, be considered a practical, if not theoretically perfect, cure.

Bernutz* gives a case of practical cure by discharge into the vagina. The patient had been ill two years. There was a cyst rising into the left iliac fossa, projecting into the left and posterior vaginal cul-de-sac, and pushing the uterus forwards and upwards. It was incised per vaginam. Caseous matter, mixed with hair, teeth, and bone were let out. Convalescence was rapid; and three months afterwards, though the cyst was still discharging, the sinus was only two centimetres in depth.

Herbiniaux† describes a case having an identical termination. The patient was aged 26. Her first labour was terminated by craniotomy. For nine months

* 'Archives de Tocologie,' 1876, p. 588.

‡ 'Traité sur diverses Accouchemens,' 1794, Bruxelles, T. i, p. 298.

afterwards she lay in bed, having the belly enormously swollen, with a very hard hypogastric tumour, and in continual pain. The tumour was as big as the head of a child two years old, and was situated in the left iliac fossa. The uterus was pushed forwards so that the cervix was above the symphysis pubis. The tumour spontaneously opened into the vagina, pus, and subsequently tufts of hair, being discharged. At various times during the treatment masses of long hair were extracted from the cyst with forceps, and also a mass of cellulo-fibrous tissue. Finally the discharge stopped, the tumour disappeared, and the sinus closed. A year after the bursting of the tumour the patient became pregnant, and was delivered without instrumental aid.

Dr. Linton* has recorded the following case:—The patient, aged 36, four days after her third confinement, the labour being a short and easy one, had a rigor, with abdominal pain, &c. In the fourth week after delivery there was retention of urine, followed by the temporary presence of pus in that secretion. On examination, the cause of the retention was found to be a tumour the size of an orange, behind the uterus, pressing it forwards. Three months after delivery Dr. Matthews Duncan opened the tumour by a free incision, and twenty-four ounces of pus, with a mass of hair and bits of bone, were removed from it. Two months afterwards, the opening could not be felt, the discharge was very slight, and the uterus in its normal position, but fixed, and surrounded by much hard swelling. The ulterior history of the case is not recorded.

Barnes† gives a case in which it seems that puncture of a cyst, which was not suppurating, excited suppuration which resulted in a cure. The patient was aged 42, and had had children. She suffered from a sense of fulness and bearing down, and there was a tumour behind the uterus. This was punctured through the

* 'Edinburgh Med. Journal,' July, 1874, p. 78.

† 'St. George's Hospital Reports,' vol. viii, p. 74.

vagina, and sixteen ounces of oily fluid, solidifying at the temperature of the air, withdrawn. After this symptoms were absent for several days. Then came fainting, pain, pyrexia, and increase in the size of the tumour. A month afterwards it was again punctured, and two ounces of turbid, oily, offensive, purulent fluid withdrawn. Puriform discharge continued for more than a month. A year and a half afterwards the remains of the tumour were traceable as a hard ridge, but the patient "had enjoyed uninterrupted ease and health."

Two other interesting cases which I quote are unfortunately incomplete; one is reported by Barnes.* In the patient's third labour, delivery was obstructed by a tumour the size of a cocoa-nut. This tumour had been noticed during a former labour, two years previously, but was not then large enough to obstruct delivery. It was punctured through the vagina with a trocar, and about a pint and a half of creamy fluid drawn off, with, towards the end, some hair. After this the patient suffered from emaciation and loss of strength, and three months after labour the tumour was found to have refilled. It was again punctured, some hair extracted, and a drainage-tube put in. The patient's condition is said to have been "improving," but the history of the case is not carried further.

The next case is recorded by Jasinski.† A patient aged 28, after her fourth labour had a continuous vaginal discharge. A swelling was felt in the vagina, which burst when firm pressure was applied to it, giving exit to pus; and a hard body was felt remaining in the situation of the swelling. After this a fifth child was born, the cheek of which was excoriated by the tumour. Subsequently, the hard body was seized with forceps, with some difficulty extracted, and proved to be a tooth. Three other teeth were then extracted, and a lump of bone felt

* 'St. George's Hospital Reports,' vol. viii, p. 75.

† 'Journal der Chirurgie und augen Heilkunde, herausgegeben,' von C. F. v. Gräfe and Ph. v. Walther. Berlin, 1829, Band xiii, S. 429.

remaining in which the teeth had been implanted. The further history of the case is not given.

Ramsbotham* gives a case of tapping of a dermoid cyst (as to which it is not certain that it had suppurated) resulting in a cure. There was a tumour behind the uterus larger than the closed fist, obstructing delivery. It was tapped with a trocar, and thick custard-like matter, becoming solid like butter when cool, removed. A month after delivery no vestige of the tumour could be perceived. Four years afterwards no tumour of any kind was present.

These are the only cases of bursting of suppurated dermoid cysts into the vagina that I find recorded.

Dr. Barnes† suggests that possibly some pelvic abscesses may have this origin without its being discovered; and I think that there may be much truth in this supposition, for there is no way, so far as I can see, of ascertaining that the wall of an abscess is that of a dermoid cyst, unless the characteristic products of these cysts are observed in the discharges; and they might pass unnoticed.

When a dermoid cyst has opened *into the bladder* the event has sometimes been announced by the presence in the urine of oily matter, becoming solid when the urine gets cold. In other cases the solid products of the cyst have become the nuclei of calculous formation; and in others bundles of hair have caused retention of urine. These differences probably depend upon differences in the contents of different cysts, the greater or less quantity of hair, fat, &c., in them. It appears from some of the cases that cystitis is not a necessary although a frequent effect; its presence or not one would expect to depend upon whether the matters discharged were solid enough to irritate the mucous membrane.

My own case, which I relate first, was one in which fat in the urine was the phenomenon which first proclaimed the nature of the disease.

* 'Pathological Transactions,' vol. iv, p. 236.

† 'St. George's Hosp. Reports,' vol. viii.

CASE 3. *Dermoid cyst between uterus and bladder opening into bladder; vaginal cystotomy; exploration and drainage of cyst; subsequent contraction and comparative relief to symptoms.*

(From notes by Mr. DAVID THOMAS, Clinical Clerk, and Dr. A. J. RICHARDSON, Resident Accoucheur.)

E. C—, æt. 44, was admitted into the London Hospital November 22nd, 1883. She complanied of bearing-down pain and scalding on micturition.

History.—She first menstruated at fourteen, and was always regular until her marriage, the flow lasting two or three days only, being scanty, and, until after her marriage, accompanied with a good deal of pain. She was married at twenty-three, and had had eleven children and three miscarriages, the last child being born at seven months' pregnancy. Excepting for these confinements and miscarriages the patient had had no previous illness. The miscarriages were attributed to hard work, and after the second she suffered so much from hæmorrhage that she had to keep her bed for seven months.

She dated her present illness from three weeks before admission. Then she noticed that her urine was thick and cloudy, "just like milk," and she had severe bearing-down pain and scalding on micturition. She also noticed that after the urine had got cold its surface appeared yellowish like wax. Her pain was worse on standing and walking and she was therefore mostly confined to her bed, and was unable to do the work of her house.

Condition on admission.—She looked rather older than the age she stated, but except for this had the appearance of health.

On abdominal examination a tumour could be felt in the middle of the lower abdomen, rising out of the pelvis, and reaching rather more than half way between the pubes and umbilicus. There was tenderness in the hypogastric region, but not elsewhere.

On vaginal examination the tumour felt abdominally

was found to be in front of the uterus, a sulcus separating the lower part of the tumour from the cervix uteri. The uterus was not absolutely fixed, but its mobility was diminished. Movement of the cervix uteri was not communicated to the tumour.

There were no physical signs of disease elsewhere. The tongue was furred, the appetite bad, and the bowels confined.

The urine was thick, contained pus, and after standing there appeared on its surface a soft butter-like substance, liquid at the temperature of the body, but becoming solid when cold.

The bladder was washed out daily with carbolic acid and water, but the above characters of the urine persisted.

December 4th.—Under anæsthesia, the urethra was dilated with Hegar's dilators till it was large enough to admit the finger. In the wall of the bladder opposite to the urethra a depression could be felt in which was an opening into which a probe could be passed for about an inch. Hegar's dilators were passed into this successively up to No. 8. This was tightly gripped by the margins of the opening and was left in it.

5th.—The dilator was removed, the bladder washed out with carbolic acid and water, and No. 9 dilator left in the opening.

7th.—The dilator was removed. The urine was escaping involuntarily. The discharge was very fœtid. The patient was anæsthetised, and the bladder opened by a vaginal incision in the median line. The opening into the cyst was then enlarged with the knife (cutting downwards and in the middle line) until it admitted a finger. The cyst was then washed out, a good deal of fatty matter coming away from it. The interior of the cyst felt rugous, and studded with gritty matter feeling like bone. A drainage-tube was put in the opening and brought out through the vagina.

8th.—The drainage-tube was removed, and the cyst washed out with carbolised water.

9th.—Discharge very fœtid, and containing much pus.

Cyst washed out with Condy's fluid and water. No appreciable diminution in the size of the tumour. Tenderness of right wrist, but no effusion into it. No pain or swelling in any other joint. Temperature over 102° last two evenings, under 100° in the morning.

14th.—Cyst regularly washed out since last note; discharge less fœtid. Tumour slightly smaller, now extending not quite half way to umbilicus. Wrist less painful; no pain in any other joint.

16th.—Temperature 103° last night; normal again this morning. Rhonchi all over chest, and crepitation over a small area at base of right lung, with slight dulness and increased tactile vocal fremitus. These physical signs disappeared in the course of the next few days.

January 11th, 1884.—For last four days patient able to retain her urine, which is alkaline, still containing much pus, although less than formerly. Tumour decidedly smaller.

24th.—Discharge still diminishing, and becoming less fœtid. Until now the catheter had been daily passed into the cyst through the opening, and the cyst thus washed out. This day the catheter could not be made to pass through the opening. The urine is less ammoniacal, and patient can retain it at least two hours. The cyst can only with difficulty be felt abdominally.

February 12th.—Under anæsthesia, the actual cautery was applied to the urethra, in order, by contracting the canal, to give the patient more control over the bladder. (It may be here mentioned that as a result of the dilatation of the urethra, and subsequent manipulations through it, this canal remained very large, and there was a laceration at its anterior part, about two thirds of an inch long.)

March 11th.—Syringing of bladder omitted for last two days. Temperature yesterday 100°; to-day 99·6°. Again syringed, a quantity of very offensive pus and a few short hairs coming away.

29th.—Discharged at her own request, on account of home troubles.

April 3rd.—Patient returned, being unable to pass her

water; but no special cause for the retention was discovered.

May 2nd.—Symptoms much the same as in March; no marked improvement since then. Under anæsthesia, the bladder was again opened from the vagina, and the communication between the bladder and the cyst enlarged. The cavity of the cyst was found about large enough to hold a chestnut. A drainage-tube was left in it.

The edges of the before-mentioned laceration of the urethra were pared, and the edges brought together with wire sutures secured with Aveling's coil and shot.

9th.—Sutures removed from urethra. Drainage-tube removed from cyst, and replaced. A shell of bone, about half inch by quarter inch in size, escaped through the opening.

26th.—Drainage-tube still kept in. A good deal of irritation of vulva from discharge. Urethral laceration perfectly united.

July 1st.—Drainage-tube left off shortly after last note. Vesico-vaginal fistula healed. Patient passes water from three to six times daily. Urine alkaline, sediment slight, consisting of pus and phosphatic crystals. Albumen $\frac{1}{8}$.

22nd.—Discharged.

January 20th, 1885.—Patient attended in reply to an inquiry by letter. Has gained flesh, and has no difficulty in retaining urine. The tumour cannot be detected by examination without anæsthesia. Passage of catheter causes pain and the urine drawn off contains clots of blood. Patient, for reasons connected with her home affairs, does not wish to come again into hospital.

In this case there was no doubt of the contraction of the cyst after it had been emptied, and I think the patient may be regarded as cured so far as that was concerned. The cystitis from which she still suffered when last seen possibly might have been cured had the patient's circumstances admitted of more perseverance in treatment. As the histories of other cases show that cystitis is not an

invariable result of the discharge into the bladder of the contents of a dermoid cyst, it is possible that here the cystitis may not have been wholly dependent upon the dermoid tumour.

I now quote a case in which the presence of the cyst was made known in the same manner, and its contraction and closure after being emptied of its contents, was successfully effected by treatment.

Larrey* has put on record the case of a patient, aged 33, who had had three children. Symptoms followed her last delivery. She had pain in the left iliac region, and noticed a tumour there the size of an apple. This tumour increased in size to that of the fist, and two months after delivery the urine became white, fat appeared in it, oily, yellowish, floating to the top "like the fat on beef tea." The tumour remained stationary, and the pains got worse. This state of things continued for five years, after which the tumour increased considerably in size, and then opened spontaneously in the linea alba, a little below the unbilicus, there being one main opening and several small ones round it. Through this, pus, calcareous matter, and then hair, were discharged. Four months after the formation of the opening, urine began to escape from it. Six months after this she was examined, and a calculus discovered in the bladder. The abdominal opening was enlarged with a bistoury and the finger put into the cyst, which was found half filled with hair. A fibrous mass, the size of a nut, which projected from the bottom of the cyst, and on which most of the hair grew, was cut off and removed. The opening between the bladder and the cyst was then enlarged and the calculus extracted. It weighed about an ounce, was phosphatic, and its nucleus was formed of hair. A catheter was fastened in the urethra, and drainage threads in the abdominal wall. The patient went on well for about a month, when she contracted smallpox. This disease ran its course favor-

* 'Mémoires de l'Acad. Royale de Méd.,' T. xii, 1846, p. 567.

ably. The catheter was kept in the urethra for four months, at the end of which time cicatrisation was complete, and the instrument was removed. The bladder seemed somewhat contracted, and micturition was frequent, but the patient was otherwise in good health, and had regained flesh and strength.

The fact of the dermoid cyst having burst into the bladder has sometimes been made known by the formation of a calculus, which when extracted has been found to have a tooth for its nucleus. The patient in such cases has had only the ordinary symptoms of stone, and no condition other than those ordinarily associated with vesical calculus has been suspected until the stone had been removed and examined, when the tooth nucleus has been discovered.

Civiale* relates the case of a patient, aged 49, who had had six children. A calculus was found obstructing the urethra. This was crushed and removed. A month later retention was produced by a tuft of hair, agglomerated by soft matter and covered with earthy incrustation. This was removed. Fifteen days later symptoms of stone began. Stones were repeatedly crushed, and found to contain teeth as nuclei. Four teeth and a piece of bone were extracted from the bladder. The treatment in all occupied seven months. She recovered with extraordinary promptitude after the extraction of the foreign bodies from the bladder, and health was restored.

Humphrey† has put on record a similar case. The patient was aged 38, and symptoms of stone dated from a confinement seven years previously. She then had pains in the lower part of the body, chalky stuff was passed, and something like a tooth. In July, 1852, the bladder was sounded and a foreign body like stone felt. The urethra was dilated, and the body, which proved to be a tooth, extracted, together with several fragments of bone, teeth, and hair. The patient recovered, and in a fortnight went home, there being still pus in her urine. Symptoms soon

* 'Bulletin de l'Acad. Méd.,' Paris, Tome xxv, p. 795.

† 'Lancet,' July 30, 1864.

afterwards returned, and bits of bone, teeth, and chalky matter were expelled. In March, 1854, the urethra was dilated, and the finger introduced into the bladder. On the left side there was found a sac communicating with the bladder by a circular opening just large enough to admit the finger, and in this was a stone. The stone was removed. The patient recovered; all bladder symptoms disappeared, and in September, 1855, she was delivered of a living child.

In two other cases in which the tumour was discovered owing to its contents passed into the bladder provoking the formation of calculi, the history is not so complete.

O'Brien* relates a case of calculus in a female aged 60, formed round a tooth, a molar, having a perfect covering of enamel. Her previous health is described as having been not very satisfactory. The stone was removed and symptoms disappeared; but the subsequent history of the case is not recorded.

Another case has been published by Blackman.† The patient was aged 36, married twelve years and sterile. At the age of twenty-one she suffered from pain and thirteen months' amenorrhœa. Then she is said to have had an escape of air from the bladder, and this was occasionally repeated subsequently. For many years she suffered from irritability of the bladder and escape of urine per rectum. At the age of twenty-six a phosphatic calculus was extracted, having a tooth for its nucleus. A year afterwards another similar one was removed. At the age of thirty another one was extracted, and it was then ascertained that no more were at that time present in the bladder. At the age of thirty-three another stone was found, "fixed in an opening just about sufficient to admit the point of the forefinger," at the upper and left part of the bladder. After this, no more urine was passed per rectum. A few months afterwards hair incrusted with calcareous matter was passed, and there

* 'Dublin Journal of Medical Science,' 1834, p. 8.

† 'American Journal of Med. Science,' January, 1869, p. 49.

was reason to suspect another calculus. The history of the case is from this point incomplete. The passage of air from the bladder and urine from the rectum are not explained.

Brodie* mentions a case of vesical calculus having a tooth for nucleus in a young lady.

These four cases offer some resemblance in their clinical history. In three out of the four (the fourth being incomplete), the extraction of the first calculus was followed by remission of the symptoms, and subsequently other concretions were discovered and removed; and finally in two cases the patient got well. Looking at these facts, and bearing in mind that it is not common for a dermoid cyst to contain nothing capable of provoking calculus formation or symptoms beyond a single tooth, we may draw this clinical induction: that when a foreign body in the bladder must wholly or in part have been furnished by a dermoid cyst, we may expect that it will not be the only one with which we shall have to deal in that case; and therefore, that if we do nothing more than extract the foreign body, recurrence of symptoms is likely to take place.

From the fact that in none of these cases is there any mention of the discovery of a tumour, I think we may fairly draw the inference that in each of them the tumour was small. That there was a dermoid cyst, I think the presence of teeth in the bladder is sufficient proof, for I do not see any other way in which the teeth could have got into the bladder except by being put there; and a tooth would be a most unlikely thing for a patient to put into her urethra, and a very difficult thing for her to get into the bladder, even if she wished to do so.

These cases, in which the bursting of a dermoid cyst has led to the presence in the bladder of a foreign body, calculous or other, raise the important question as to the best mode of dealing with foreign bodies in the female bladder. The study of surgical text-books, and of most

* 'Diseases of the Urinary Organs,' 4th edition, 1849, p. 262.

cases of the kind on record, would, I think, leave on the mind of the learner the impression that the dilatation of the urethra, and the removal of foreign bodies through this canal, is the proper method if the foreign body be not too large. This seems to me a bad rule of practice. I entirely concur with the teaching on this point of the late Dr. Marion Sims, and hold with him that vaginal cystotomy, and not the stretching of the urethra, is the best course. It is impossible to read Delpech's account of his case without thinking how much more easily he could have done all that he did if he had opened the bladder from the vagina instead of manipulating through the urethra. By the vaginal incision we get plenty of room, and get near to the part we have to deal with. It is one of the easiest of operations, a simple incision in the middle line being all that is wanted. If the incision is carefully kept in the middle line, no important structure can be divided. As there is no loss of substance, the sewing up of an incision thus made is an easy task, not at all comparable in difficulty to an operation for the usual kind of vesico-vaginal fistula. And while it may be advantageous to sew up the incision after its purpose has been accomplished, it is not necessary; for the experience of those who have treated cystitis by the making of an artificial vesico-vaginal fistula (one that is made by a clean cut, not by a loss of substance from sloughing) shows that the difficulty is to prevent such a fistula from healing, rather than to make it unite. Moreover, the benefit which is stated to follow the making of a fistula in cases of cystitis would make one think that it may sometimes be beneficial, when a foreign body has for long irritated the bladder, to let the viscus for a few days have the complete rest afforded by the escape of urine through a fistula.

Dilatation of the urethra, on the other hand, if carried much beyond the size necessary to admit the finger, brings with it risk of laceration of the urethra and incontinence of urine, either permanent or at least very troublesome to cure; while it is far less easy to manipulate instruments or

extract a foreign body through the urethra than through a free vaginal incision. For these reasons I hold that the extraction of foreign bodies from the female bladder through the urethra should be regarded as practice requiring justification, and vaginal cystotomy should be the rule.

I have before remarked that the contents of dermoid cysts, when discharged into the bladder, do not necessarily set up cystitis. When they are not of an irritating nature, even should the cyst not close, the patient may suffer very little from the discharge of the cyst products through the bladder. The two following cases illustrate this:

Fuller* describes a case of the practical cure by spontoneous emptying of a dermoid cyst opening into the bladder. A lady aged 50 had had two children, and always good health. When aged 33 she had a severe fall, followed by uterine hæmorrhage. A tumour was then perceived in the left hypogastric region, which disappeared in time, but left hardness behind it. Shortly afterwards the urine began to contain pus, but except for this she remained well till the age of forty-seven. Then the amount of pus in the urine increased, and the patient began to have febrile symptoms. A soft tumour, the size of a walnut, was discovered within the vagina, just beyond the clitoris, and the urine was found to contain sebaceous matter. Exacerbations of the symptoms were repeatedly relieved by putting the finger in the vagina and emptying the tumour by pressure. Hair and cheesy matter were at first expelled, but after it had been thoroughly emptied it never refilled with solid contents, but could be emptied with the slightest pressure.

Rayer† quotes from Fabricius Hildanus a case very similar apparently to that of Fuller. A widow lady, aged more than sixty, "to be commended for her virtue and piety" (the author vouches for her character as proof that the hairs were not put into the bladder), for eight years had abdominal pain and urinary troubles, the urine

* 'Path. Trans.,' vol. xxi, p. 273.

† 'Mémoires de la Soc. de Biologie,' 1850, T. ii, p. 191.

containing purulent and sticky matters, with "long red hairs." Other writers, says Fabricius, had reported such cases, but added that they died in violent pain. This patient got well, "lives tranquilly and happily, about twice a year passes some hairs, but without great suffering."

There are other cases less completely recorded.

Gallez* quotes Vidoni as his authority for the case of a patient aged 29, in whom a dermoid cyst burst into the bladder, and after three months the patient was cured.

He quotes another by Morelle, of which the result is not stated. I have not been able to get at the original records of these cases.

Ulrich† mentions a case in which several quarts of pus and fat escaped from the bladder, but he does not state the result.

C. The suppurated cyst may neither empty itself nor be emptied by the surgeon; and in that case the cyst may discharge indefinitely, and the patient may die either exhausted by prolonged suppuration, or from some secondary or intercurrent morbid change.

These cases are more numerous in literature than those which have been cured; but the only instruction that they give us, from a therapeutical point of view, is as to the effect of neglect. I refer to them only for the sake of completeness.

Hamelin‡ relates the case of a patient aged 24, who had suffered from bladder symptoms for three or four years. She was delivered of a stillborn child, six days after which she was attacked with malignant fever, to which she succumbed at the end of twenty-two days' illness. At the autopsy, the bladder was found distended, and containing thick fœtid matter mixed with hair. There was a tumour the size of a hen's egg near the right ovary.

* 'Histoire des kystes de l'ovaire,' Bruxelles, 1873, p. 154.

† 'Monatschrift für Geburtskunde,' 1859, S. 166.

‡ Rayer, 'Mémoires de la Soc. de Biol.,' 1850, T. ii, p. 150.

It contained bone and brain matter, was adherent to the bladder, and the hair in the bladder sprang from the lining membrane of the tumour.

Rayer* quotes a case from Schenck, of a woman who repeatedly passed hair from the bladder. The urine was very fœtid, and there was an abdominal tumour. After an illness of several months the patient died. No account of a post-mortem examination is given.

Virchow† mentions a case in which an ovarian cyst, which was filled with matted hair, opened into the rectum, and the patient died exhausted by hectic.

Lee‡ describes the case of a patient aged 28, who had had one child. For five years she suffered from an abdominal swelling which was painful and tender, together with weakness, lethargy, and bearing down. The urine contained enormous quantities of pus. Then hairs and shreds of bone were passed with the urine. The treatment adopted was washing out the bladder and sac with water containing opium and astringents. The patient became pregnant, and died from puerperal convulsions. The autopsy showed a dermoid cyst of the left ovary, opening into the bladder.

De la Riviére le jeune§ gives the case of a lady aged 58, who had suffered from bladder troubles for seven years. An abscess in the bladder was diagnosed, but treatment refused. The bladder was sounded, and a cavity penetrated by the instrument, giving exit to a quantity of pus. Febrile symptoms followed, and death took place two months afterwards. On autopsy, several pieces of bone and a ball of hair were found in the bladder, enclosed, it is said, "in a portion of a cyst of which we saw distinct enough traces."

Barnes‖ gives the case of a patient aged 30, who

* Op. cit., p. 188.

† 'Monatschrift für Gebürtskunde,' 1859, S. 167.

‡ 'Medico-Chirurgical Transactions,' vol. xliii, p. 104.

§ Quoted by Rayer, 'Mém. de la Soc. de Biologie,' 1850, Tome ii, p. 184.

‖ 'St. George's Hospital Reports,' vol. viii, p. 76.

had no symptoms prior to delivery, but who a few days after delivery was seized with shivering and pain in the abdomen. There was a fluctuating mass behind the uterus, and febrile symptoms. Pus was discharged per rectum. No local treatment was carried out, and the patient died five and a half months after delivery. Autopsy showed old peri- and para-metritis, and an abscess in the lung. The retro-uterine tumour was a dermoid cyst the size of a cricket-ball, containing hair and pus. In this case, it is difficult to say what part the dermoid cyst played in the production of the morbid process which proved fatal.

Barnes* gives another case exemplifying the long continuance of suppuration when the cyst is not emptied. Shortly after delivery an abscess formed and opened into the vagina behind the uterus. This continued to discharge and was frequently washed out. Five weeks afterwards the tumour was of the size of an orange. The opening was enlarged so that the tip of the finger could be inserted, and hair and teeth extracted with a small hook. The cavity was subsequently injected with iodine, which caused pain and pyrexia. Hairs were afterwards passed, showing either that the hairs continued to grow or that the cyst was not emptied. Three years afterwards the discharge still continued, but the cyst had contracted, and measured only an inch in length.

Phillips† describes the following case:—Patient aged 30. Difficulty in micturition from early life. Symptoms of cystitis, with hypogastric uneasiness and swelling, and febrile treatment two years before death. Treatment gave some relief to bladder symptoms only. Autopsy showed ascites, ovarian tumour size of human heart, containing stuff like clotted cream and hair. Bladder distended and plugged up with stuff like that in ovary and hair. At lower and posterior part of bladder a small cyst also communicating with bladder and filled with similar stuff, hair, and a tooth embedded in bone.

* 'St. George's Hospital Reports,' vol. viii, p. 77.

† 'Medico-Chirurgical Transactions,' vol. ix, 1818, p. 427.

Greenhalgh's* case is one with the same ending. Patient, aged 28, had had two children. The second labour, two years before death, was hindered by a tumour which filled the sacral cavity and prevented the passage of the head. This was tapped and emptied of cheesy matter. Bladder symptoms then began, and continued until her admission into St. Bartholomew's Hospital. She was then passing pus and hair per urethram. There was a solid mass in the supra-pubic region, and a sinus at the umbilicus, through which pus, urine, and water injected into the bladder escaped. The bladder was washed out, without benefit, and the umbilical opening enlarged, but the patient died the day after the latter proceeding. A cyst of the right ovary was found, containing hair and bone, and communicating with umbilicus, bladder, rectum (this probably the aperture made by the tapping) and the peritoneum; peritonitis having been the cause of death.

A very similar case has been put on record by Ruge.† His patient was aged 46, had had two children and two miscarriages. She had been ill two years and a half before coming under Ruge's care, with urinary troubles, thick fœtid urine, febrile symptoms, and loss of strength. Treatment had not produced benefit. Several masses of hair were removed from the bladder, and a calculus was suspected. The operation undertaken to remove this per urethram resulted in the discovery of no calculus, but the removal of further masses of hair, and the finding of an opening in the bladder wall leading into a cavity so deep that it could not be explored with the finger. The patient died twenty-four hours after. A cyst of the left ovary was found, the size of the fist, containing pus, having masses of fat, and communicating by a sinuous channel with the bladder. The cyst also communicated with the small intestine, but it was the opinion of Ruge that this was made during the autopsy. A similar cyst in the right ovary. Old and recent peritonitis.

* 'Lancet,' Nov. 26, 1870, p. 741.

† 'Verhand. der Ges. für Geb. in Berlin,' 1846, S. 172.

Another case has been reported by Seutin*. The patient, aged 58, had had two stones extracted, one of them containing a tooth as nucleus. The patient died, and a cyst of the left ovary was found containing hair, bone, and teeth, a concretion formed round a tooth being impacted in the channel leading from the cyst to the bladder.

Marshall Paul† gives the following case :—A widow, aged 40, multiparæ, suffered for four or five years from abdominal pain and swelling, with frequent retention of urine, alternating with the passage of gravel and bits of bone. "Inflammation" was diagnosed and treated, but the patient died exhausted. On autopsy, the bladder was found surrounded by fatty matter, and with an opening in it. The ovaries were united, forming a tumour so large as to hide the uterus from view.

Montgomery‡ gives a case in which locks of hair were discharged from a fistulous opening to the right of the umbilicus, together with fœtid discharge, and subsequently a solid mass containing bone. Together with this natural pregnancy and delivery occurred. The termination of the case is not recorded; but it is mentioned that she improved greatly after the discharge of the solid mass.

Moore§ describes a cyst so large that "the abdomen was larger than at the full period of gestation," which opened spontaneously through the umbilicus. The opening was enlarged and as much of the contents as possible removed. After this the condition of the patient improved, but she died about a week afterwards.

Lebert‖ mentions a case in which a dermoid cyst opened into the sigmoid flexure, was not emptied, and death resulted. He also quotes from Jajarvay a case (the reference to which he does not give) in which a cyst burst

* Waelle, 'Ueber de Perforation der Blase durch dermoid Kystome des Ovariums,' S. 9.

† 'Archives gén. de Méd.,' 1828, p. 283.

‡ 'Dublin Journal of Med. Science,' 1846, p. 240.

§ 'Path. Trans.,' vol. xviii, p. 190.

‖ 'Mémoires de la Société de Biologie,' 1852, vol. iv, p. 253.

externally, the opening remained fistulous, and the patient died exhausted by suppuration.

Whether a cyst will empty itself or can be emptied, seems, judging from the cases here collected, to depend upon the size of the cyst and also upon its shape. A large cyst is less likely to empty itself spontaneously through the comparatively small opening made by suppuration; but if it be a cavity of regular shape it may be easily emptied by the surgeon. If it be sinuous in shape, or divided into several loculi, then it is unlikely to be spontaneously emptied, and it will be difficult, perhaps impossible, for the surgeon to empty it through the aperture of perforation. In such a case removal by abdominal section is clearly the course indicated. That this can be successfully done is shown by the case of Pincus* which I now quote.

The patient, aged 27, until then healthy, had pelvic inflammation after the birth of her first child two years previously. After the inflammation a hard tumour remained in the left lower belly. The urine after the first labour was of a milky colour; after the second, which ended naturally, it sometimes contained pus, sometimes was clear. In June, 1881, when she came under treatment, she was wasted, with an aspect of suffering. There was a tumour in front of the uterus, adherent to the bladder, reaching to within two fingers' breadths of umbilicus. The bladder was washed out and explored, and a red warty spot discovered at the right upper and posterior part, from which a blood-clot was pulled with forceps, and subsequently a quantity of offensive pus was expelled through this opening into the bladder. The finger was put into the opening, and entered a cavity the size of an egg, separated by a kind of projecting septum from another and larger cavity lying higher up, which was too large to be explored by the finger. The bladder and abscess cavity were repeatedly washed out with salicylic solution, and much pus got away. A drainage-tube

* 'Deutsche Zeitschrift für Chirurgie,' Bd. xix, Heft i, S. 1.

was left in for fourteen days, and again for a period of eight days; and after this treatment the symptoms improved and she was discharged from the hospital. She remained well for four weeks, and then the symptoms returned, and when readmitted, four months after her discharge, was in much the same state as when treatment was begun. The same treatment as before was continued for a month, but without benefit. Laparotomy was therefore performed, and the tumour, which was of the size of a child's head and connected with the left ovary, removed. Its adhesions with the bladder were torn through, and much stinking pus escaped into the abdomen. This was mopped up, and the hole in the bladder united by sutures. The patient did well, and was discharged with the urine free from albumen.

Pincus remarks that his case shows that blood, pus, and putrid matter may pass through the bladder without setting up cystitis, or at least without making the urine ammoniacal.

A survey of these cases appears to me to warrant the following conclusions as to the treatment of cases in which a pelvic dermoid cyst has opened into an accessible mucous cavity:

1. The suppuration of a dermoid cyst is sometimes a favorable event, leading to its cure.

2. This is especially likely to be the result if the cyst be small and unilocular, and if it have opened into the vagina.

3. An originally very small cyst may when it suppurates rapidly attain a large size.

4. When the cyst is small it may become inverted through the aperture of discharge, become polypoid, and be spontaneously expelled or easily removed by the surgeon.

5. This process may be imitated by the surgeon, but it is not safe unless it can be very easily done.

6. When a suppurated dermoid cyst has been emptied,

it contracts, and its cavity either becomes obliterated, or remains as a small sinus which causes no trouble.

7. The first indication for treatment, in a cyst which has burst, is to empty it; for cure by suppuration depends upon the cyst having been emptied.

8. The opening of the cyst should be enlarged as much as can be safely done, the cavity explored, and its solid contents removed as completely as can be done without violence to the integrity of its walls.

9. If the cyst have discharged into the bladder, its cavity should be reached by vaginal cystotomy, not by dilatation of the urethra.

10. If the cyst be multilocular, or if, after having been emptied as thoroughly as possible, it do not rapidly contract (from which it may be inferred that it has not been completely emptied), it is likely that it will discharge indefinitely and exhaust the patient's strength, and therefore it should be removed by abdominal section without long delay.

Mr. KNOWSLEY THORNTON would not attempt to follow Dr. Herman over the very large area he had covered in his valuable and interesting paper; it would only be possible to do this when the whole paper was in print, and not the mere skeleton which had been read. He would refer to a few points only. First, as to the cysts which opened into the bladder and were cured, the evidence must be very clear that they were really ovarian, for ordinary dermoid cysts were known to occur in the cellular tissue between uterus and bladder. Second, as to the dermoid ovarian cysts which were said to be unilocular, his experience was that unilocular ovarian dermoids were very rare; he did not think he could recall a single case. In the majority, dermoid structures were found in more than one cavity, and in those in which dermoid structures were only in one cavity, this cavity was associated with an ordinary multilocular ovarian tumour. Third, the pathology of such tumours was against a complete cure by suppuration, though it might happen occasionally from the violence of the putrid inflammation entirely destroying the skin, &c., lining the cyst. It was well known that unless ordinary skin cysts had their lining membrane entirely removed or entirely destroyed by inflammation and suppuration or by caustics, they did not heal. Then the fact that these dermoid ovarian tumours were occasionally

malignant must be a strong reason against attempting cure by incision and drainage. He had treated such a case with Dr. Matthews Duncan. The tumour burst into the bladder; he attempted to remove it by abdominal section, but found it impossible; then he attempted to cure by drainage, but after many weeks the patient died worn out with the discharge, and with distinct evidences that the mass was, or had become, malignant, infiltrating neighbouring parts. Of course if a dermoid cyst had burst into a mucous cavity or canal before the surgeon saw it, he must do the best he could on general surgical principles, but even in those extreme cases it might still be possible at once to remove the mass by abdominal section, and this would be much better treatment than a lingering suppuration with cystotomies, &c. With regard to the side issue raised by Dr. Herman of cystotomy *versus* rapid dilatation of urethra, he entirely agreed with him that in most cases the cutting operation was the safest and best. The evil results of rapid dilatation were not always immediately apparent.

Mr. Alban Doran had recently communicated to the Royal Medical and Chirurgical Society a memoir which professed to demonstrate that many dermoid cysts of the abdomen which had been described as non-ovarian were really ovarian cysts which had become separated from their pedicles, a complication now known to be no great rarity. In that communication he had purposely distinguished abdominal dermoid cysts from those occasionally found in the pelvic cavity. Pelvic dermoid cysts were undoubtedly non-ovarian in some cases. Dr. Ord had described a case occuring in an active young country gentleman and rapidly proving fatal; the testicles, the homologues of the ovary and some of its appendages, were free from dermoid disease. In one of Dr. Herman's cases the dermoid cyst which lay in the bladder was believed to be ovarian because it was attached by a band to one ovary. In dermoid disease of the ovary the tumour is not attached to the ovary; on the contrary, the ovary develops the tumour within itself and becomes lost in its own product. As many of the cases quoted by Dr. Herman recovered, there could be no proof of the precise seat of origin of the tumours.

Dr. J. Braxton Hicks, from investigations he had at one time made, thought that many of these dermoid cysts were of the nature of the tumours called "fœtus in fœtu" which could be found about the median line, from the top of the head to the sacrum. In one case of dermoid cyst which he tapped, six weeks afterwards he attempted removal, but as all the parts irritated by the tapping had been glued together by malignant exudation it was found impossible.

Dr. Routh said, in looking to the origin of these dermoid cysts, he could not help feeling that most of them were in reality,

as suggested by Dr. Braxton Hicks, a portion of a fœtus in fœtu; in fact that they were congenital and developed subsequently under favorable circumstances, and he instanced the case of the boy aged 11, who died from the sudden enlargement and development of an enclosed fœtus at that age in the neighbourhood of the stomach. If true for a whole fœtus, *à fortiori* could it be true for portions of fœtus. But whenever a dermoid cyst contained besides the hair, teeth or bone, he thought it must be of ovarian origin. He himself believed that the cases where they were found in the rectum were of such a nature, an ovule probably having been accidentally dropped on some portion of intestine, and grown inwards instead of outwards, as in some fibrous growths, and so developed within the intestine, either freeing itself at such a place, or being detached and carried down lower along the intestinal tract. So far as he knew no cyst containing *teeth* could have other than an ovarian origin.

Dr. PLAYFAIR said that the observations which had fallen from the President led him to rise to endorse what had been said by Dr. Herman as to the advisability of not attempting to operate through a dilated urethra. When, some years since, Mr. Teale, of Leeds, advocated rapid dilatation of the urethra as a cure for cystitis, he had frequently resorted to that procedure, certainly with benefit in many instances, so far as its primary object was concerned. He had also many times dilated the urethra for vesical examination and other purposes. He had found, however, that it very often led to troublesome secondary results, such as incontinence of urine, lacerations of the urethral mucous membrane, which often gave rise to very troublesome results, not, perhaps, experienced until after a lapse of time. He had long since, therefore, come to the conclusion that rapid dilatation of the urethra was very far from being the simple and safe operation it was generally considered to be. He had only a few opportunities of performing vaginal cystotomy, but the results had been so satisfactory that he was quite disposed to agree with Dr. Herman that in the class of cases he referred to it was likely to be preferable to urethral dilatation.

Dr. GALABIN thought that if Mr. Alban Doran's views were confirmed, that dermoid cysts, not originating in the usual way, by transformation of the ovary, did not occur in other parts of the abdomen, but did sometimes occur in the pelvis, this fact might throw some light upon the mode of origin of such growths. It was known that dermoid cysts, due to inversion of a pouch of epidermis, like the dermoid cysts of the orbit, might occur in various parts, but these only produced hair and fat. Again, there were growths due to attachment of one ovum to another, but these, as might be expected, were generally found at some external part. But dermoid cysts producing teeth or bones were hardly ever, if ever, found in any place where they could not be

derived from the ovary, or, much more rarely, from the testicle. There was therefore very strong evidence that they originated from the ovules by a kind of imperfect parthenogenesis. Now, if it sometimes happened that a liberated unimpregnated ovum, after rupture of the Graafian follicle, became implanted somewhere on the peritoneum, and grew in this fashion, it would at once be explained that such growths were found in the pelvis, and not in other parts of the abdomen. Some of Dr. Herman's cases, in which the growth penetrated bladder or rectum, contained teeth, but appeared unilocular, might be of this nature. As to treatment, he was very strongly of the same opinion as the author and Dr. Playfair, that vaginal cystotomy was far preferable to dilatation of urethra for the removal of any growths, especially if instruments as well as the finger had to be introduced into the bladder. He had not had experience of it in the case of dermoid cysts, but had removed pedunculated growths of the bladder, malignant or otherwise, in this way. He had been struck with the facility of the operation, the rapid recovery of the patient, and the ready closure of the opening.

Dr. HERMAN, in reply, said that in the title and throughout his paper he had used the term "pelvic" dermoid cysts. He did so to avoid expressing an opinion as to the origin of these cysts, a point upon which the cases did not enable him to throw light. It might be as Mr. Thornton said, that most dermoid cysts were multilocular; but numerous cases quoted in his paper showed that some were unilocular, and could thoroughly empty themselves, or be emptied through the aperture of bursting. He did not negative the statement that so long as a bit of unaltered dermoid tissue remained in the wall of a cyst that cyst would not close; but if it were admitted that suppuration might completely alter the character of the cyst wall, the effect upon practice was the same as if the proposition in question did not hold good. He agreed with Mr. Thornton that intentionally to open a dermoid cyst was not good practice; but his paper dealt with cases that had already burst, or were about to burst when they were opened. It was often impossible to distinguish between a suppurated cyst and an abscess otherwise formed. The case mentioned by Mr. Thornton, in which he had been unable to remove a dermoid cyst, showed the utility of considering the questions raised in the present paper. He was glad to find so many speakers agree with him as to the advantages of vaginal cystotomy and the disadvantages of dilating the urethra, a point which he thought important.

CASE OF OBSTRUCTED LABOUR IN WHICH SPONTANEOUS VERSION FOLLOWED AN UNSUCCESSFUL ATTEMPT TO DELIVER BY THE CROTCHET AFTER CRANIOTOMY.

By S. D. Hine, M.R.C.S., Ilminster.

(Communicated by Dr. GERVIS.)

On the afternoon of February 5th last, I was called in consultation by my friend Dr. E. Stephens, of Ilminster, to see a patient of his, the wife of a miller, aged 34.

There was a history of a previous delivery of a premature female child a year ago. The woman had been in labour for thirty hours, pains continuous and apparently forcible. Liquor amnii had escaped twenty-one hours. Upon vaginal examination, I found a coil of umbilical cord in the vagina in which no pulsation was perceptible, the os uteri fairly dilated and easily dilatable, the vagina relaxed, cool and moist; the fœtal head could be felt at the brim of the pelvis, the occiput directed towards the ramus of the mother's left ischium. Dr. Stephens informed me that the head had occupied its present position for at least nine hours. I observed that during a pain, although apparently forcible, the head did not advance or descend at all, and in the intervals of the pains I was unable by pressure to make the head recede. The uterus could be felt through the abdominal walls tense and firmly contracted on the body of the child; the head appeared to be immoveably impacted between the symphysis pubis and the promontory of the sacrum, which latter could be felt projecting abnormally towards the symphysis pubis and considerably diminishing the antero-posterior diameter of the pelvis. So far as I could judge there was less than a space of three inches between the projecting promontory and the symphysis; the transverse diameter of the

pelvis was apparently not lessened. Dr. Stephens informed me that he had attempted to use the long forceps, but had failed to get up the second blade into position for locking. After consulting together we determined to make another trial of the forceps, and should this prove unavailing, to proceed to craniotomy.

The patient appeared a good deal exhausted, although she had been kept well supplied with frequent small quantities of liquid nourishment. After emptying the bladder with the flexible catheter I proceeded to use Simpson's long forceps and got one blade fixed *in situ*, without any particular difficulty, but do what I would I could not pass up the second blade; the point appeared to strike on the projecting promontory of the sacrum, and obstinately refused to slip into position. I now withdrew the forceps and proceeded to penetrate the skull with the perforator. This took some time to effect, as the bone appeared more than usually hard, but after a while I affected an entrance, and after enlarging the opening succeeded in emptying the cranial cavity of its contents. This being completed I paused to allow the pains to force down the collapsed skull, but in this we were disappointed, for although the pains continued to be forcible and were almost unremitting, no descent of the head was perceptible; in fact, it seemed to be as immoveably fixed as before the brain had been evacuated. After waiting a moderate time to see if any change would take place, and none following, we resolved to put on the crotchet.

I got the point of the instrument well fixed in the skull and employed traction simultaneously with the uterine contractions, but notwithstanding that I changed the point of fixation and employed my full force for upwards of an hour, I was unable to effect any downward movement of the head. It appeared firmly jammed within the pelvic brim.

I at length withdrew the instrument firmly convinced that no reasonable force would avail to induce the head to descend. We now consulted together as to what steps

we could take next. Visions of Cæsarian section, or the alternative of a patient dying undelivered, passed gloomily through our minds. Meanwhile the pains of our patient still continued almost unremittingly. After some minutes (certainly not more than ten) I proceeded to make another vaginal examination, and on lifting the sheet was surprised to observe some meconium lying on the surface of the cerebral matter on the bed. On passing up my finger, what was my surprise to feel in place of the sharp angles of the child's skull the softer and more yielding infantile buttocks. I made out the anus and genital organs of a boy, and no trace of the head could be detected. It was now evident that the head had receded and the breech was occupying its former position.

The pains continued, but seemed to effect no further descent of the breech, and after a short interval I with some little trouble passed up my hand, and brought down first one foot and then the other, and having converted the case into a footling one, in a little time got down the hips and shoulders and finally the collapsed head, the latter in its reversed position passing with very little difficulty.

The child appeared to be of average size and weight, and was well developed.

The patient made a good recovery in spite of being attacked with several epileptic seizures, to which from a girl she had been subject, and which dated from a severe fright.

It would be interesting to know if any similar case of change of presentation from head to breech has been observed or recorded by any other practitioner of obstetrics.

Mr. W. B. Robertson, in reference to the remark just made, said that it appeared strange why we did not hear sooner about version in this case. The writer of the paper distinctly stated that the head was so engaged in the brim that it could not be pushed up, the membranes having been ruptured many hours previously, and the uterus firmly contracted.

Dr. Barraclough said it appeared to him that, in this case, after the perforation of the cranium and the evacuation of its con-

tents turning should have been performed at once. The head, which had been impacted, in somewhat of an hour-glass fashion, between the promontory of the sacrum and the pubis, and so had been prevented moving either forwards or backwards, would have admitted of the passage of the hand up by its side when its bulk was diminished, and delivery could then have been quickly and safely accomplished. This not having been done, nature came to the rescue, and took upon herself to do that which art might have done an hour and a half sooner.

Dr. AUST LAWRENCE remarked on the rarity of the case. In reference to the question of turning *versus* forceps in contracted brims, he stated that although it might be possible by turning to bring through a child, yet it was more often stillborn than when forceps were used. A slight degree of narrowing which might cause sufficient delay to destroy a child when delivered by turning would be overcome by forceps if sufficient time were given for the head to mould, and in the event of craniotomy being required he did not believe that if turning had been performed a living child could have been brought through.

Dr. GRIFFITH said it would be interesting to know if the version was accelerated by previous manipulation of the abdomen in the attempts to deliver by the crotchet.

Dr. PLAYFAIR said that in justice to the author of the paper it ought to be pointed out that there were good reasons for thinking that the practice they had followed in this instance was undoubtedly correct. Without discussing the relative merits of turning and craniotomy in contracted brim—and he agreed with Dr. Lawrence that the former was often the preferable procedure—it was clear that in this case the latter was the proper course to adopt. This was obvious from two facts: First, the child was known to be dead, a pulseless loop of cord having been long prolapsed. Second, the uterus was described as having been in a state of tonic contraction, which would have made turning dangerous as well as difficult. It was still within the recollection of the Society that many years ago the late Dr. Mackenzie proposed that turning should be the regular course after perforation. To that he could not adhere, but it was undoubtedly a very valuable occasional resource, and he had more than once easily terminated cases by turning, after failing to complete delivery with the cephalotribe or craniotomy forceps. This case seems to be a very interesting illustration of nature's adopting a course already recommended by art.

DECEMBER 2ND, 1885.

J. B. POTTER, M.D., President, in the Chair.

Present—47 Fellows and 4 Visitors.

Books were presented by Dr. Budin, Dr. A. Martin, Dr. Wassiege, the Edinburgh Obstetrical Society, and the Smithsonian Institution.

Edmund Wilkinson Roughton, M.D., was admitted a Fellow of the Society.

T. Hillier Chittenden, L.R.C.P. Lond. (Whitwell); Ogilvie Grant, M.D. Edin. (Inverness); Edward F. Grün, M.R.C.S. (Putney); and Albert Wilson, M.D. (Leytonstone), were declared admitted.

The following gentleman was elected a Fellow of the Society:—Edgar T. Underhill, M.B. Edin. (Tipton).

The following gentlemen were proposed for election:—Harvey K. Bradbury, M.R.C.S.; Willoughby Furner, F.R.C.S. (Brighton); Zebulon Mennell, M.R.C.S.; and Samuel George Milner, L.R.C.P. Ed. (Norwood).

DOUBLE PYOSALPINX WITH RUPTURE OF THE TUBES.

By A. H. N. Lewers, M.D.

C. B—, æt. 18, single, employed last ten months in a chocolate manufactory, before that a waitress for three years, was in good health till October 18th, 1885.

On October 18th she had a "sick headache." On the 20th she had slight pain in the abdomen, which gradually increased up to the 22nd, when she was admitted to the medical wards of the London Hospital. On the 22nd vomiting came on for the first time, and persisted with the other symptoms up to the 24th. On the latter day she had a rigor, and the temperature, which had been more or less febrile throughout, reached 105°. She died on the 25th, seven days from the onset of the illness.

In the history it is stated that "the catamenia had always been regular and painless."

Post-mortem examination showed general peritonitis. The mucous membrane of the body of the uterus was greenish. Bristles passed into the Fallopian tubes from the uterus more easily than usual. The left Fallopian tube had given way at a part of the tube (about one inch from the uterus) where the tube was not dilated; the edges of the aperture are greenish. An inch beyond, the left tube was dilated and adherent to the ovary. This dilated part had given way at its outermost part and communicated with the general cavity of the peritoneum. The interior of the dilated tube was filled with a greyish green soft material, but the normal longitudinal folds of the mucous membrane of the tube were still well seen. The right tube was similarly affected, but had only given way at its dilated part.

The specimen is interesting, more particularly because the patient's death was obviously due to the condition of the Fallopian tubes. It is also to be remarked that no cause of the acute general peritonitis was discovered during life, and indeed the case being on the medical side of the hospital probably no vaginal examination had been made. But even if such examination had been made it is hardly likely that the condition of the tube could have been made out after the physical condition of the acute peritonitis had become established. Both tubes communicated with the uterine cavity by orifices which were rather unusually large.

It is remarkable that one of the tubes had given way at a part *where it was not dilated,* this perforation therefore being due probably to the inflammation affecting the lining membrane of the tube taking on an ulcerative character.

There was no history of gonorrhœa, but the patient's condition in life render it not unlikely that she may have had gonorrhœa.

Mr. DORAN called the attention of the Society to the fact that in Dr. Lewer's case the fimbriated extremities of the Fallopian tubes were open, contrary to the almost universal rule in inflammatory affections of the tubes. The patency of the tubes accounted for the acuteness and fatal termination of the case, for the inflammatory products escaped into the peritoneum. He referred to another case of tubal disease ('Trans. Path. Soc.,' vol. XXXI, p. 174), where patency of the fimbriated extremity of the tube caused ascites and other symptoms which greatly obscured diagnosis.

FURTHER NOTE ON THE CORRODING ULCER OF THE OS UTERI.

By JOHN WILLIAMS, M.D., F.R.C.P.,
OBSTETRIC PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL.

IN March, 1884, I read before the Society a paper on the corroding ulcer of the os uteri, which contained notes of three cases which had come under my observation. Two of the patients were dead at that time, and I showed the organs of one of them. Last August the remaining patient (Case 1) died, and I show the organs to-night. She died in Buckinghamshire, and it was not possible to have the examination made until sixty-nine hours after death. I am indebted to Dr. Boxall for making, and to Dr. Barker, of Wantage, and Dr. Hopkins Walters, of Reading, for the help they gave me in securing, the examination.

The organs were generally healthy, with the following exceptions:

The omentum was adherent to the left broad ligament at its outer end.

The left kidney was twice its natural size and was converted into a bag, the pelvis and ureter were greatly dilated, and the substance of the kidney was not more than three eighths of an inch in thickness.

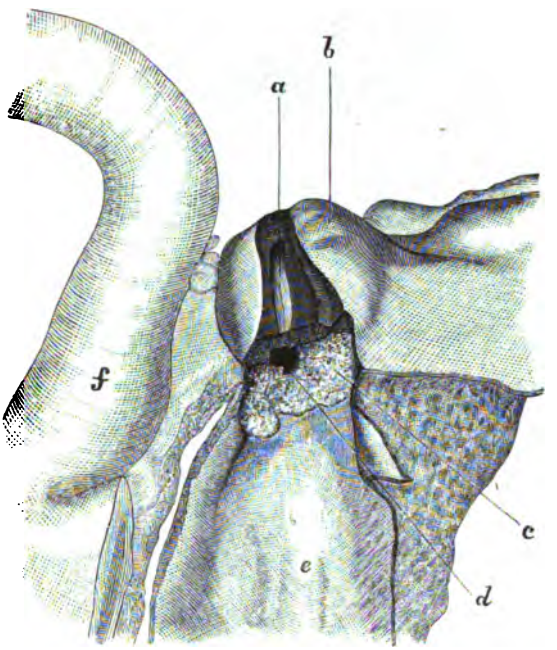
The right kidney was large and flabby, and was of a slate colour from decomposition. The pelvis was not enlarged. On section eight or ten purulent deposits were found in its substance, the largest of which was about the size of a pea. The capsule of both kidneys was thickened and adherent.

The fundus of the uterus was in the centre of the pelvis and fixed by adhesions to the sigmoid flexure. The rectum

occupied the right side of the pelvis. The Fallopian tubes and ovaries were apparently healthy.

The contents of the pelvis were taken out entire and afterwards examined.

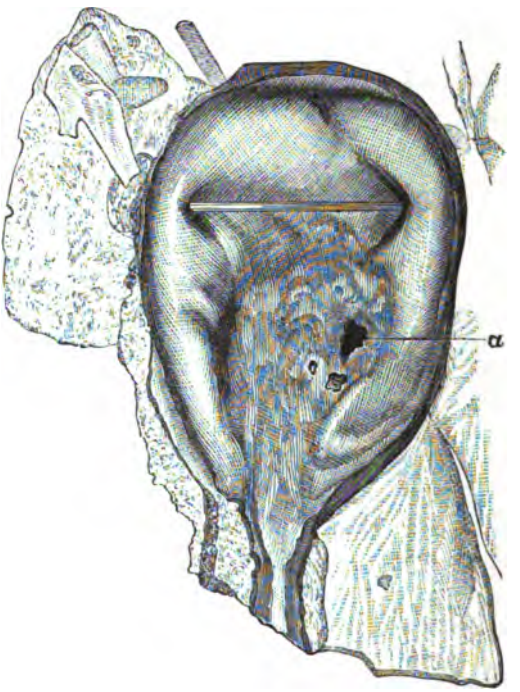
The rectum was opened along its posterior aspect and found to be healthy. There were no adhesions between it and the vagina. The vagina was then opened along the



a. Cavity of uterus. *b*. Remains of body of uterus. *c*. Ulcer. *d*. Place where ulceration has opened bladder. *e*. Vagina. *f*. Rectum.

posterior wall, the incision being continued to the fundus of the uterus. The lower two thirds of the vagina is healthy; the lower third is occupied by an ulcer which involves the whole circumference of the tube, and is about one inch in length. Its lower border corresponds with the reflexion of the peritoneum in Douglas's pouch.

The margin of the ulcer is clean cut and sharply defined. The edge is not undermined or thickened, and runs round the vagina in an almost straight line. The surface of the vagina around it is healthy. The floor of the ulcer is considerably depressed and shaggy. It is bounded above by the remains of the uterus. The ulcer surrounds a cavity the size of a nutmeg, communicating above with



Bladder opened. *a*. Opening from vagina into bladder.

the uterine and below with the vaginal canal. In the upper part of the anterior wall is a small irregular opening where the septum between the vagina and bladder has been destroyed.

The cervix of the uterus has completely disappeared, and the uterus is represented by the upper one inch of the

body. This is markedly atrophied. Its tissues are normal. The cavity measures five eighths of an inch in length and is not dilated.

The urethra and bladder were opened along the anterior wall. The ulcer opens into the bladder a little above the opening of the right ureter and to the left of the middle line. A probe can be readily passed along the right ureter. The orifice of the left ureter cannot be found, and it is probably represented by a small ulcer about the size of a split pea with irregular walls and depressed base. A probe passed downwards along the left ureter can be introduced to within an inch of the bladder where the tube appears to be blocked by three hard and enlarged glands. The internal iliac artery on each side of the pelvis is partially calcified; but calcification is more advanced in the left than in the right.

Microscopically, nothing is found but the appearances met with in an ordinary ulcerating surface—simple destruction of tissue. There is no epithelial structure to be seen anywhere.

The naked-eye and microscopic appearances met with in this case are precisely similar to those met with in the specimen exhibited at a previous meeting ('Obstr. Trans.,' vol. xxvi). The conditions found in the kidneys and in the pelvic vessels present also a very striking resemblance; for in both cases the kidneys were diseased alike, one kidney changed into a sac (the right in one, the left in the other) and the other kidney was suppurating.

Again, the internal iliac arteries were calcified in both cases. I suggested that the case exhibited in 1884 was one of senile gangrene dependent on calcification of the internal iliac arteries, and that the case brought before you again to-night was one of lupus. The post-mortem examination has not supplied evidence in favour of its being lupus, but has furnished some evidence in favour of regarding the ulcer as senile gangrene—that evidence being the presence of calcification of the internal iliacs. Whatever the nature of the disease may be, it appears to be clear that

corroding ulcer is distinct from cancer, and to be distinguished from cancer during life.

Dr. Champneys referred to the fact there was hydronephrosis in this case, the ureter not being occluded. He had discussed this question elsewhere and shown that in cases of extroversion of the bladder there was almost invariably dilatation of the ureters from spasm of their vesical orifices. Indeed, any irritation of the bladder which caused it to contract constricts the orifices of the ureters. This might take place even in such functional irritation as that of the nocturnal urinary incontinence of children.

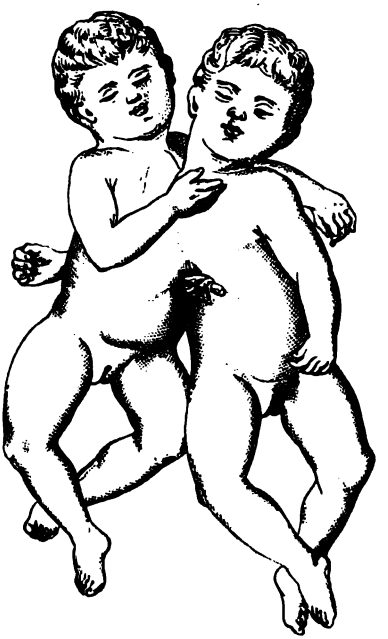
EXTRA-UTERINE GESTATION.

Dr. W. S. A. Griffith showed a specimen of tubal fœtation at a very early period, the site being close to the uterus. The case, which had occurred in the practice of Mr. F. W. Strugnell, presented the common history of such cases. After missing one period, a patient aged 28 was seized suddenly with great abdominal pain and collapse, proving fatal in fifteen hours. The abdomen was found full of blood. No obstruction was found, on careful examination, to the tube. Dr. Griffith wished to raise the question as to the cause of such cases, when no mechanical obstruction is present.

Dr. Campbell Pope also exhibited a specimen of extra-uterine gestation, and Dr. Griffith, Dr. Herman, and Mr. Doran were appointed as a Committee to examine and report upon it.

FEMALE TWIN MONSTER.

Dr. Galabin showed for Dr. Lewis Jones a female twin monster with fusion of the thoracic and abdominal walls. This case was the second pregnancy of a woman twenty-three years of age, and occurred on November 30th, 1885. She had been ten hours in labour when Dr. Jones first saw



her, and on examination he found the os uteri nearly fully dilated, with a large bag of liquor amnii protruding, through which he was able to satisfy himself of the feet being the presenting parts, but owing to his feeling at least three feet and a hand, he was puzzled. On the membranes rupturing, he was confirmed in his diagnosis of the feet and hand. He therefore brought down one foot and

used gentle traction in the hopes the other child would not descend. Finding no progress after waiting some time, though the pains were strong, he decided on bringing down the other foot, which he did with considerable difficulty, and to his surprise found it to be the corresponding foot of the other child; being alarmed at this mistake he sent for his assistant to administer chloroform and hastened to bring down the foot of the first child, which he readily succeeded in doing, but here again he was puzzled in finding the hand in the vagina, and on further examination could find no head in the pelvis. The next step taken was traction on the first child during pains, while at the same time he impeded the descent of the other. Finding his mistaken interference with the second child of no avail, he decided to use traction on both and very soon discovered the true nature of the case. The two heads descended rapidly through the capacious pelvis in the anterior dorsal position, the labour being completed in fourteen hours. This monster was in the eighth month.

The mother made a good recovery.

REPORT ON MR. GRÜN'S SPECIMEN OF SUPPOSED EXTRA-UTERINE GESTATION WITH BIRTH THROUGH UTERUS. (See page 226.)

The specimen consists of a placenta and fœtus. The placenta measures about five inches in length and its edges are much folded inwards, so as to give the entire structure the form of an elongated cylinder. In this folded state it measures about an inch and a quarter in breadth. The two ends of the placenta gradually diminish in thickness to a thin edge, as the placenta naturally does. One side of it is thick and ragged, looking as if part had been broken away. The other side tapers to a thin and com-

paratively smooth edge like the ends. Hence we conclude that the mass before us is not the entire placenta, but only part of it. The placenta on the side where its edge is unbroken is covered on the uterine aspect with smooth membrane over a surface about half its extent in length and about half an inch transversely. This smooth surface ends by being continuous with the inner surface of a piece of attached membrane measuring about four by one and three quarter inches, smooth inside, rough, and continuous with the uterine aspect of the placenta externally. This membrane we take to be part of the decidua vera.

The fœtus measures an inch and one tenth in length; it is well formed and not mummified, and enveloped in the amnion, which is completely separate from the placenta. It is evident that the placenta is in advance of the fœtus, measuring by the scale of normal development.

We examined the patient on October 16th. The uterus was retroflexed, readily reduced, and apparently perfectly normal in form and there was no evidence of a pouch in the uterine wall, of division into cornua, or of dilatation of the orifices of the Fallopian tubes. The cavity measured three inches in length. The appendages appeared to be enlarged on both sides. None of the pelvic organs were tender to the touch.

The history of the case, given by Mr. Grün, goes to show that the fœtus and placenta were developed in the tube and born into the uterine cavity. This view is at first sight apparently corroborated by the shape of the placenta, but the fact that, on examination, the placenta seems not to be entire deprives its shape of any significance. All that we can say is, that the above-mentioned interpretation of the clinical phenomena (viz. that the case was one of tubal or interstitial pregnancy) rests entirely upon the correctness of Mr. Grün's observations made at the time of delivery. From examination of the specimen and of the patient subsequently we are unable either to affirm or to deny it.

As an example of hypertrophy of the placenta after

death of the fœtus, the case seems to us one of much interest.

G. E. Herman.
Alban Doran.

CASE OF "PROTRACTED PREGNANCY."

By W. Arnold Thomson.

As an instance that 280 days or thereabouts is not, as lawyers have preached, the ultimum tempus pariendi, I desire to record the following case which occurred lately in my practice, feeling it may be of sufficient interest. Presuming that the facts of the case as related are true and implicitly exact (as I have every reason to believe they are), it illustrates to what length of time gestation may (normally) proceed without anything unusual before or at period of delivery.

In January this year Mrs. L— engaged me to attend her confinement, expected due in third week in March. Nothing happening by end of that month, the patient and her mother, fearing something was wrong, sent for me. On examination I found nothing amiss, but as they both seemed incredulous I made inquiries, and learnt that the reason was that they happened to know (precisely) the exact date on which coitus last took place, from which period considerably over the allotted time had elapsed. My patient was a very fragile, delicate, and ailing person, not long married, and had had a miscarriage some time previous to this conception owing to a shock received by the sudden death of her father. Menstruation recurred after the miscarriage, and the last period was finished by 1st of June following. Her husband left home a week after this on business and returned on Monday, June 16th, for one night only, leaving home for the south of England on the following Tuesday morning, the 17th, remaining

away for four months, during which period she went and lived with her mother and was very sickly. Coitus admittedly took place on the night in question, and symptoms of pregnancy, according to the wife's story, soon manifested themselves.

Now, my patient was not delivered until mid-day of the 13th of April, 317 days after last menstruation or 301 from date of last coitus. I wish to say again that the facts of this case can be relied upon, and I have corroborated them by the separate evidence of four relatives.

Such instances of prolonged gestation are interesting and important both socially and medico-legally, provided, of course, the testimony establishing them is satisfactory and conclusive.

Unfortunately I omitted to weigh or measure the child when born, which was a female, but I should say it was of full average size and weight.

I may add that according to the Prussian law the child in question would be legitimate in a contested case; according to the Scottish law or the French code it would be illegitimate; while in England its legal status would be determined according to the moral aspects of the case.

Dr. Graily Hewitt inquired whether anything was known as to the duration of the menstrual interval in this case. The late Dr. Tyler Smith was of opinion that a relation subsisted between the duration of pregnancy and the menstrual interval. In Casper's work it was stated that Cederschjold had observed cases of excessive prolongation of pregnancy in cases where the menstrual interval was unusually extended.

ON THE INFLAMMATIONS OF LUPUS OF THE PUDENDUM.

By J. Matthews Duncan, M.D.,

WITH

HISTOLOGICAL OBSERVATIONS AND REMARKS ON LUPUS.

By G. Thin, M.D.

It is a character of lupus of the pudendum to be liable to attacks of acute inflammation, and there are cases in which inflammation is the chief, or indeed only, constituent of the disease in the genital organs, for there is lupous vaginitis without any local ulceration or hypertrophy appreciable by the senses.

Cancers of the pudendum and of the other genital organs are more common; but there is not, in this set of diseases, a similar liability to attacks of acute inflammation. We do not find stricture of the urethra, or of the vagina, or of the rectum, associated with cancer, as we not rarely do in cases of lupus. Or, if we do find such stricture, it is not the result of inflammation, as in lupus, but is caused by extension of the malignant growth around the mucous passages. It must not be forgotten that perimetric, or even general peritoneal inflammation, is not rare in cases of uterine cancer, and I am not aware of the association of peritoneal inflammation with lupus, except, of course, in such cases as present peritoneal injury, the result of perforation by uterine ulceration.

Masses of cancer, whether of the pudendum or of the cervix, and the hypertrophies of lupus wherever situated,

are liable to inflammation. They become swollen, they are tender, and they are red; and under the influence of treatment these qualities may be diminished, or may disappear in a very remarkable manner. So great, indeed, is this improvement, in some cases, as to lead to temporary difficulty or error in diagnosis.

Difficulty of diagnosis is well observed in some cases of pruritus. In such cases the swelling caused by dermatitis is often very great and extensive; and the difficulty may only be overcome by the success in securing complete and permanent cure by medicinal treatment. But I am not sure that there is not intimate alliance of such cases of pruritus with lupus; certainly, if not intimately allied, they are diseases that should be, in any classification, in close mutual vicinity. Dr. Thin and Mr. Morrant Baker, who have both paid special attention to dermatology, looking at cases of pudendal lupus, have expressed their sense of this alliance and have suggested that both diseases may be due to the irritation of filth and discharges and friction. But the whole history of the diseases is amply sufficient to establish a distinction, on the one side, between pruritus and lupus, and on the other side between lupus and epithelioma.

I have not seen a regular abscess in lupous tissue, but it is not rare to find excavations yielding pus. In one of my cases the indurated tissue around hypertrophic lupous masses presented several small openings from which a thin pus flowed.

These examples of inflammation are to be distinguished from cases of extensive superficial ulceration with copious secretion of pus, such as are seen at the lower part of the vagina, and which are, as I have elsewhere remarked, often very remarkable on account of absence of pain and tenderness.*

Cases of lupous vaginitis occur without attending ulceration or hypertrophy. They are recognised by their occurring without any apparent cause, by the fever being

* See a case recorded in 'Edinburgh Medical Journal,' Dec., 1862.

slight or absent while the local indications of inflammation are great, by their tendency to recur, and by their future or past history showing their nature by characteristic ulceration and hypertrophy in the pudendum, or, more rarely, similar disease in the nose and fauces.

One of the commoner lupous inflammations is that of the vulva or mucous area enclosed by the labia majora. Still more common, and especially affecting young women, is inflammation of that part of the vulva called vestibule, or the area enclosed by the nymphæ and within the labia majora where they adjoin the vaginal orifice. The inflamed parts are tender and occasionally bleed on being touched. The disease is often regarded by the female as a kind of leucorrhœa; and it is often treated, in vain, as a vaginal disease.

The most painful inflammation is that of the bladder, but the pain and strangury are not so great as in other forms of cystitis where the urine contains an equal quantity of pus, and the bladder is equally tender, hard, and contracted. With the cystitis urethritis is generally combined, and this helps to distinguish the lupous from other forms of cystitis.

Urethritis occurs alone, and the passage is frequently dilated, in addition to offering the other characteristic signs of inflammation.

Vaginitis is the most common mucous inflammation complicating lupus. Besides the characters of this disease which I have already mentioned there is sometimes an extraordinary copiousness of purulent discharge, which except in acutest cases, is rather thin and watery; often the inflamed surface has not the ordinary intensity of redness, but is rather brownish or even of a darker tint; and often it bleeds, and sometimes very copiously (hæmorrhagic vaginitis).

On the rectitis of lupus, which also is common, remarks may be made closely similar to those on the vaginitis.

Here it may be added that the intertriginous inflamma-

tions are not uncommon, and of all degrees, and with or without ulcerations at the bottom of the foldings. In one case this inflammation extended between the hips to the middle of the sacrum; the mutually touching surfaces were not ulcerated, but presented a mucous-like surface, and had been for a long time secreting pus very copiously.

These various inflammations may occur singly or combined, and we have noticed good instances of the combination of urethritis, vaginitis, and rectitis. In one case we had this combination with stricture in each of the three passages. In one case we observed copious albuminuria with lupus, but whether the combination was accidental or not we could not determine.

The frequent occurrence of stricture in association with lupus cannot fail to strike the observer. In my experience this disease has been by far the most frequent cause of stricture in the female pelvis.

The stricture may be of three different kinds. First, it may be caused by the growth of the lupous tissue, and by that alone. Second, it may be caused by present inflammatory induration. Third, it may be from bands of fibrous tissue. These three distinct kinds may be in all possible combinations.

Strictures by growth of lupous tissue are observed chiefly in the rectum and vagina. They do not occur as tight separate bands through which the finger cannot be passed, or passed only with difficulty; but a considerable length, from about half an inch to about two inches, of the mucous canal is transformed into a rigid cylinder which has lost all contractile power and which cannot be expanded without laceration. Closely similar strictures occur in the three mucous canals as the result of cancer.

Strictures produced by present inflammation accompany vaginitis and rectitis, for it is only in the rectum and vagina that I have distinctly observed them, and more frequently in the rectum than in the vagina. No doubt there is an identical condition of the urethra to be more or less distinctly made out; and the contraction of the

bladder in cystitis is analagous if not identical. These strictures may render the passage of a finger difficult and painful, but they do not, unless very rarely, have a smaller lumen. They are hard and may occupy a length, say as much as an inch of the passage; but they are generally less in extent, yet never presenting gristly hardness and a thin cutting edge. Similar strictures are observed in the rectum in cases of parametritis; but these, instead of being near the anus, as in lupus, are met with only as high as the examining finger can reach. I have met with no similar strictures in cases of cancer. This stricture is curable.

The third kind of stricture, of gristly hardness, often of minute lumen, often of small extent, and sharp edged, is met with in all three passages. It is a relic of past inflammation, an atrophic or shrunken or cirrhosed condition of submucous tissue or a degenerated state of muscular tissue. In the urethra and in the rectum it may produce retention. I have not found it in connection with cancer. I have seen somewhat, not closely, similar conditions, which were evidently congenital, and this in all three passages. This kind of stricture is not rare as a consequence of the healing of wounds or of sloughing sores after parturition. In my limited syphilitic experience I have observed such strictures in the rectum and vagina, only once in the urethra. In the upper part of the vagina, and especially in old women, strictures are very common and have been described by McClintock; and there is some probability in the view that they have a close alliance with the strictures of lupus.

On the theory of the production of strictures such as I have been describing I do not enter, meantime being satisfied with referring to the work of Cripps (p. 204), 'On Diseases of the Rectum and Anus.'

I know nothing in the treatment of these inflammations and strictures that is peculiar. Rest, diet, laxatives are employed according to ordinary rules, and the practitioner may resort to such means as are of avail in cases of

pruritus vulvæ. Among these are local mercurial applications, and they appear to me to be remarkably useful in lupus. The preparations most resorted to are the mercurial ointment and the Lotio Hydrargyri Nigra. Strips of lint soaked in the black wash and properly placed in the vagina have a great power over persistent lupous vaginitis.

HISTOLOGICAL OBSERVATIONS AND REMARKS ON LUPUS.

By G. Thin, M.D.

1. *Case of F—* (*being Case 4 in the preceding paper on the Ulcerations of Lupus*).

Portions of excrescences situated on the mucous membrane of the vulva in two patients, under the care of Dr. Matthews Duncan were examined. The structure being found to be the same in both instances it is unnecessary to report on them separately.

The condition is one of hypertrophy. The hypertrophied tissue consists of *white fibrous tissue* in various stages of development, and a considerable number of *small elastic fibres*. It is freely permeated by *blood-vessels* of new formation, and, more especially near and around the vessels, contains a considerable number of *lymph-corpuscles*. *Clefts* or *lacunæ* are met with, lined with a delicate nucleated membrane which I believe to be in connection with the lymphatic system.

The fibrous tissue is essentially the same in character as that found in a case of true elephantiasis of the prepuce which I had occasion to examine. There are no evidences of cancer, syphilis, nor lupus, in the strict pathological application of the latter term.

I have found in the portions I examined nothing which

would indicate what the cause of this hypertrophy may be. (The analogous hypertrophy in elephantiasis is known to be caused by a disturbance in the lymphatic system, and, as is well known, the genital organs are its special seat. The loose connective tissue of the vulva affords unusual facilities for the further development of any new growth of fibrous tissue when the first impetus has been given.)

2. *Case of G—* (*being Case* 3 *in the preceding paper on Hypertrophies*).

Sections through the tissues sent me show a semicircle of epithelial membrane investing a mass of fibrous tissue.

The epithelium for the most part does not differ from the epithelium of the mucous membrane of the labium in health. Such differences as there are consist in a slight formation of a corneous layer on the surface, and in appearances indicating rapid growth. The appearances referred to are an accumulation of small cells immediately under the epithelium, and in an unusual number of similar cells in the membrane itself in the angles between the individual prickle cells.

The fibrous tissue is in some parts in a low degree of formation, consisting of delicate fibres loosely connected with each other, which have not reached the stage of fascicular or "bundle" development. In other parts the development has proceeded to a higher stage, there being a partial arrangement in bundles; but all the fibrous tissue is in a more or less embryonic condition.

There are elastic fibres present, particularly noticeable near the connective-tissue cells, but their number appears to be much smaller than in ordinary fibrous tissue. The tissue is richly supplied with blood-vessels.

The cells present consist of leucocytes (lymph-corpuscles) which are found in dense masses around some, but not all, of the blood-vessels, and in great numbers immediately under the epithelium at certain parts; and

further, of cells which must be considered connective-tissue cells in various stages of development. These cells are some of them round or rounded, and vary in size from a lymph-corpuscle upwards. Others are flattened and angular; others (probably because they are seen edge-ways) appear long and narrow. These cells have all distinct contours, and where the connective tissue is most developed they can be seen to be applied to partially formed bundles. In some cells, however, in which development has proceeded still further, the cell substance has become so closely applied to the fibrous tissue that the contours are in my preparations not to be made out; and their exact relationship to the surrounding elements is still further obscured by an intimate contact with elastic fibres.

The tissue examined is thus an embryonic fibrous tissue undergoing rapid development. There are none of the appearances characteristic of cancer, syphilis, or lupus vulgaris. There is no new cell-growth or neoplasm in the ordinary accepted sense.

The appearances observed are similar to those seen in elephantiasis tissue. At one part, immediately under the epithelium, the accumulation of leucocytes is sufficiently great to warrant the belief that at this part inflammatory conditions were present, and to suggest that the cause of the development of blood-vessels and effusion of plastic material may be found in some source of irritation acting on or through the epithelium.

3. *Case of R— (being Case 4 in the preceding paper on Hypertrophies).*

The sections examined in this case were made through a portion of tissue which included the skin and mucous membrane of the labium majus. The appearances observed are in all respects similar to those described in the report in G—'s case, with the exception that the cell-

infiltration around the vessels was greater, and that very few vessels were seen which were not surrounded with cell-exudation. The signs of an irritative condition of the epithelium of the mucous membrane are also more marked.

The epithelium of the mucous membrane is over a considerable extent very thin and on its deeper surface partially disintegrated. At some places the limiting membrane is destroyed, and isolated epithelial cells, in which the nucleus does not stain and which are undergoing degeneration apparently of a colloid character, are found imprisoned in the connective tissue. They appear to have become detached from the epithelial membrane whilst it was being pushed upward by pressure from below.

On the lower border of the membrane the cells are at those places more or less detached from each other and numerous leucocytes are found in the spaces between them.

The condition of the epithelial membrane is one in which disintegration is in excess of repair and which seems to be preliminary to breaking down or ulceration.

The fibrous tissue is found in all stages, from the most immature condition, in which very few fibrillæ are formed, to one in which the bundles of white fibrous tissue are formed and compactly united. The most immature fibrous tissue is at a point beneath the junction of the mucous membrane and the skin.

There are numerous delicate elastic fibres in all the parts.

There are dense masses of lymph-corpuscles around all the blood-vessels, and numbers scattered loosely in the tissue immediately under the epithelium. In this latter position the arrangement is such as would justify the term "small-cell infiltration."

The blood-vessels are numerous, and many of them pass perpendicularly to the surface; a peculiarity which exists also in the case of G— previously described.

The connective-tissue cells are found in the various

transition forms described in the tissue in G—'s case, and the same description applies to those observed in the present case.

The general remarks made in reference to the pathological condition in G—'s case apply to this one. As in that case the condition may be summed up as consisting in a rapid formation of fibrous tissue with signs of an irritative process affecting the epithelium and acting on the blood-vessels.

There are none of the characteristic appearances found in lupus vulgaris, syphilis, or cancer.

4. *Report on the structure of the tissues removed from M. L— (being Case 5 in the preceding paper on Hypertrophies).*

1. *The growth.*—The growth is composed of fibrous tissue covered by epithelium, in this respect resembling skin or mucous membrane. The epithelial covering is thin, and above the apices of the papillæ very thin. It presents nothing unusual.

The fibrous tissue is imperfectly formed, the fibrillar elements not being consolidated in bundles, and contains lymph-corpuscles in great numbers.

The ulcer.—The surface of the ulcer is formed by a dense and agglutinated layer of lymph- (pus-) corpuscles. Immediately below the surface the lymph-corpuscles are still so numerous that no traces of fibrous tissue are observed, but on going still deeper delicate fibrillar elements begin to show themselves. Deeper still the fibrous element comes into prominence and the base of the ulcer is formed by fibrous tissue moderately infiltrated by lymph-corpuscles, and containing bundles of involuntary muscular fibre.

Neither in the growth nor in the ulcer were found the elements characteristic of cancer, lupus (in the strict modern use of the term), nor of any form of cellular neoplasm.

5. *Case of T—(being Case 2 in the preceding paper on Hypertrophies).*

1. *Labium majus.*—The epithelium of the labium is thin. There is a considerable amount of cell-infiltration in the papillary layer.

There are tracts of dense cell-infiltration around the blood-vessels in the deeper parts of the fibrous tissue.

The growth.—The epithelial membrane on the surface is similar to that investing the healthy structures of the part.

The growth is composed of fibrous tissue in various stages of development. In some parts there is a fairly mature formation of tissue with an indication of bundles, and where this is the case the ordinary cell-elements of connective tissue (the flat cells or spindle cells of histologists) are seen in abundance. At other parts the fibrous tissue is less mature and there is considerable infiltration by lymph-corpuscles. In other parts again there are dense clusters of lymph-corpuscles embedded in immature fibrous tissue. These clusters are usually found around the blood-vessels.

Perforated tissue.—Sections through a part of the hypertrophied tissue in which a fenestrum existed shows the walls of the foramen to be perfectly covered with a well-formed epithelium continuous with that of the growth.

The examination showed that there were no structural changes indicating the existence of cancer, lupus, or syphilis.

(In the above reports the term lymph-corpuscle is interchangeable with white blood-corpuscle, leucocyte, and pus-cell.)

6. *Case of E. S—(being Case 6 in the preceding paper on Hypertrophies).*

The tissue sent me by Dr. Matthews Duncan on June 10th, 1885, labelled "Syphilitic Lupus," when hardened

in bichromate solution, exhibits the following characteristics :—The epithelium which invests the portion of tissue resembles that of a mucous membrane, and as there are no hairs or appendages of hairs in the sections it may be assumed that the growth was unconnected with the skin.

The epithelium is fairly normal, but immediately underneath it there is a very moderate small-cell infiltration, this infiltration forming an irregular line between the epithelium and the fibrous tissue.

The growth consists of fibrous tissue, fairly dense at some parts and younger at others, but nowhere entitled to be called embryonic. Scattered throughout this fibrous tissue are the nuclei of connective-tissue cells (the number visible indicating a growth of tissue), and a very sparse amount of exudation cells. The exudation cells are mostly found immediately round the blood-vessels.

The coats of some arteries appear to be thickened, and in one artery the lumen of the vessel is observed to be filled with an organised nucleated plug.

The histological conditions indicate a very low form of inflammatory change, possibly with a morbid condition of some of the blood-vessels, leading to the formation of a somewhat dense fibrous tissue.

The appearances, while consistent with the hypothesis of syphilis, contra-indicate that of lupus vulgaris. The histological changes characteristic of lupus vulgaris are absent.

The tissue from same patient, labelled "Urethral Caruncle," was hardened in bichromate solution. An examination of sections of the tissue showed that the surface of the investing epithelium is ragged and broken, but the line of the undermost layer can be made out. The whole of the sub-epithelial tissue is densely infiltrated with exudation cells. The fibrous tissue sparingly present in the growth is immaturely developed, and in some parts traces of it cannot be found amongst the conglomerated exudation cells.

Blood-vessels are numerous. The coats of the larger arteries appear to be thickened. The cell-exudation, although dense everywhere, is most dense under the epithelium. The tissue is in the condition of subacute inflammatory exudation in which a feeble fibrous tissue is partially developed.

Summary of the Histology.

In reviewing the histological appearances which have been described several features are found common to all the hypertrophic cases. The leading features are the remarkable growth of fibrous tissue and the absence of any neoplastic growth which could directly or indirectly account for it. Subsidiary to the growth of fibrous tissue are the appearances associated with the blood-vessels, which in their least developed condition are not greater than those found in any rapidly growing tissue, but in the more developed conditions are distinctly those which characterize a low chronic inflammatory process. The microscopic appearances throw no light on the cause of this inflammatory process.

The epithelium of the mucous membrane may be in a normal condition, or it may be in all the stages that characterise inflammation from a slight degree to that which involves complete destruction; the signs of inflammation being a greater or less infiltration with leucocytes and degeneration, dissociation and finally disappearance of the epithelium.

When inflammatory changes in the tissue are marked they are found especially developed immediately below the epithelium, suggesting that in these cases at least there has been some superficial cause of inflammation.

The hypertrophy is caused by a growth of ordinary white fibrous tissue. When carefully examined, and when appearances found in different parts of the same section and in tissues from different patients are compared, it is

observed that all the stages which usually characterise the development of this tissue are well exemplified. The process of the condensation of organising effused plasma into fibrillæ and bundles, and the interspersion amongst them of delicate elastic fibres, are well marked.

The cells observed in this fibrous tissue are either ordinary exudation cells (lymph-corpuscles, white blood-corpuscles) or flat cells in various gradations to the tapering elongated form known as so-called spindle cells and characteristic of developing fibrous tissue. The exudation-cells are found most numerous immediately around the blood-vessels.

The blood-vessels are usually numerous. They present no abnormal appearance. A considerable number of very large capillary vessels are sometimes found proceeding from some considerable comparative depth direct to the surface, the straight end coming into almost direct contact with the epithelium.

In one case lacunæ of some size were noticed, suggestive of some degree of lymphatic congestion, but usually no appearance of this kind was present.

The curious formation of rings of hypertrophied tissue presented nothing unusual when examined microscopically. The epithelial covering of the ring was entire, and the substance of the ring was composed of simple fibrous tissue.

In the ulcerated conditions the only appearances observed were those characteristic of inflammation leading to destruction of tissue.

In regard to the cause of the progressive effusion of plastic material in such quantity in some cases and of the inflammatory breaking down (ulceration) in others, although it has escaped observation, it is legitimate to infer that it is of an unusual and distinctive character. The degree and kind of hypertrophic growth are not explicable on the supposition of the action of any of the ordinary causes of inflammation, nor can the hypertrophic cases be considered as instances of simple chronic inflammation.

The microscopic appearances differ from those which characterise lupus vulgaris. The distinct areas in which

masses of granulation cells surrounding the so-called "giant-cell" have taken the place of broken-down fibrous tissue in that disease are absent.*

They differ so entirely from those characteristic of carcinoma that no further remark on that score is called for. They differ from those seen in a syphilitic gumma, in so much as the formation of apparently normal fibrous tissue may go on to a great extent without breaking down, and in the process not being necessarily accompanied by dense small-cell infiltration. Further, cicatricial tissue was not found in these cases, nor were the coats of the blood-vessels found thickened or diseased.

The process shows some analogy with that which characterises elephantiasis arabum—the true Oriental elephantiasis. It is analogous in so far as there is effusion of organisable material leading to the formation of fibrous tissue. But it differs from this affection in the absence of marked affection of the lymphatic system and in the presence of more or less inflammatory action. In elephantiasis arabum, the obstruction of lymphatic vessels by entozoa leads to the slow and continuous exudation of plastic material, which forms enormous masses that clinically have nothing in common with these cases except that they are both hypertrophies.

In Europe the term elephantiasis is applied by authors to various distinct conditions which have nothing in common but hypertrophy and non-malignancy. It does not represent the idea of any defined disease and its relations to the affection in question cannot therefore be discussed. I have little doubt that some of the cases which have been described as elephantiasis of the vulva by continental writers are examples of this disease.

Dr. HERMAN had seen two cases of stricture of the female urethra due to general fibrous thickening of the wall of the

* These distinctive appearances of lupus vulgaris are not described by Dr. Angus Macdonald in reference to the case described by him in the 'Edinburgh Medical Journal,' 1884, p. 914. Although Dr. Macdonald refers in his paper to a microscopical examination his remarks are too general to be of any value.

DESCRIPTION OF PLATE XVI.

Illustrating Dr. Thin's Histological Observations in Dr. Matthews Duncan's paper on the Inflammations of Lupus of the Pudendum.

The drawings represent appearances observed in sections prepared from two cases, those of G— and R—. Figures 1, 2, 4, and 7 are from the case of G—. Figures 3, 5, 6, and 8 are from the case of R—

FIG. 1 illustrates the part of a section towards the free surface. The epithelium is normal.

a. The epithelium.
b. A blood-vessel.
c. Small cell-infiltration surrounding the blood-vessel.
d. Connective-tissue cell.

FIG. 2.—From a part in which there are numerous blood-vessels and considerable small cell-infiltration. Low power drawing.

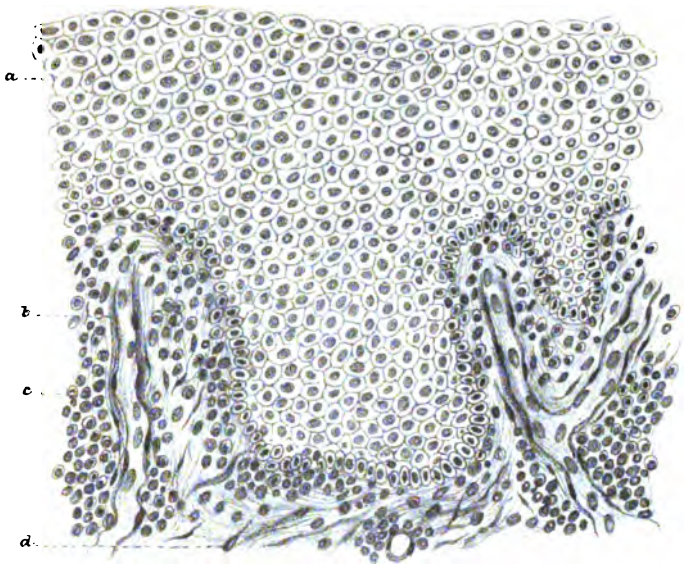
a. Small cell-infiltration.
b. Transverse section of blood-vessel showing the perivascular infiltration.
c. Blood-vessel seen longitudinally.

FIG. 3.—*a a*. Blood-vessels cut transversely.
b b. Flat cells in spindle form in developing fibrous tissue.

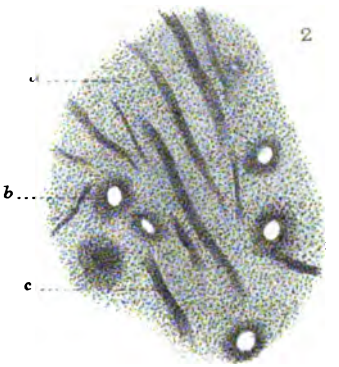
FIG. 4.—Developing white fibrous tissue more highly magnified.

a. Exudation cell (white blood-corpuscle).
b. Partially-formed white fibrous tissue.
c. Flat cell in spindle form.

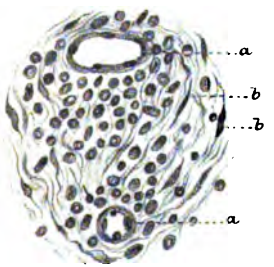
1



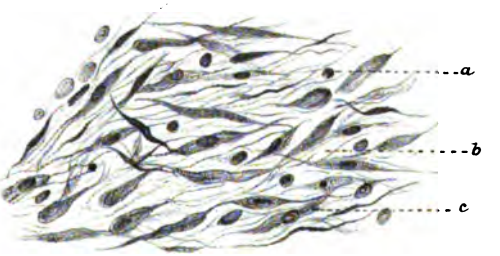
2



3



4



Edgar Thurston del.

West, Newman & Co. lith.

DESCRIPTION OF PLATE XVII.

Illustrating Dr. Thin's Histological Observations in Dr. Matthews Duncan's paper on the Inflammations of Lupus of the Pudendum.

FIG. 5.—Epithelium in process of breaking down.

a. Free border of epithelium.

b. Hole in the epithelium.

c c. Holes in the epithelium containing leucocytes (white blood-corpuscles).

d. Lower border of epithelium, with dense small cell-infiltration below it; at

e, the line between the epithelium and the small cell-infiltration could not be made out.

FIG. 6.—Illustrative of the mutual relation of the small cells, the connective tissue cells, and the white fibrous tissue.

a. Flat connective-tissue cell in spindle form.

b. Group of small cells.

c. White fibrous tissue showing indications of the formation of bundles.

FIG. 7.—A very low power drawing (only about 4 diameters), to show the numerous blood-vessels ascending to the epithelium.

a. The epithelium.

b. Blood-vessel.

c. Very young fibrous tissue with numerous cells.

d. Fibrous tissue sufficiently developed to be traced as groups of bundles.

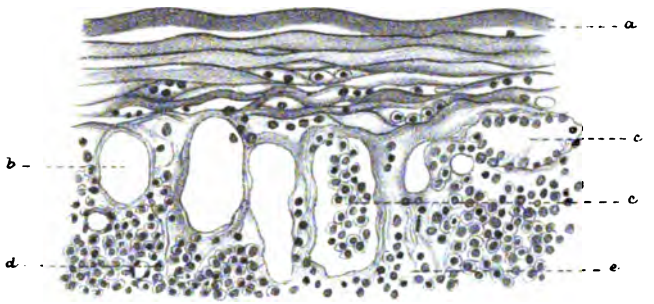
FIG. 8.—Newly formed fibrous tissue from a very thin section under a high power.

a. Bundle (primary bundle, *mihi*) of white fibrous tissue.

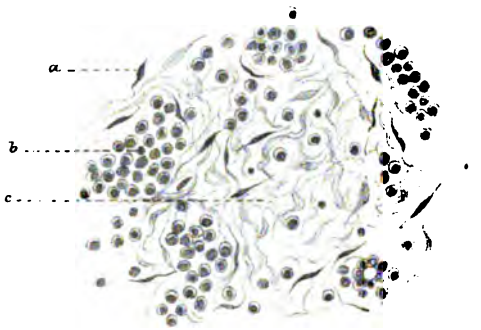
b. Elastic fibre.

(The description of Plate XVIII is printed on the Plate.)

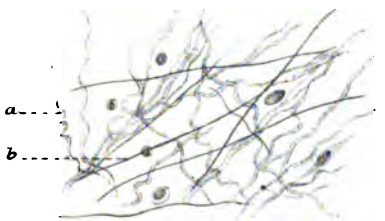
5



6



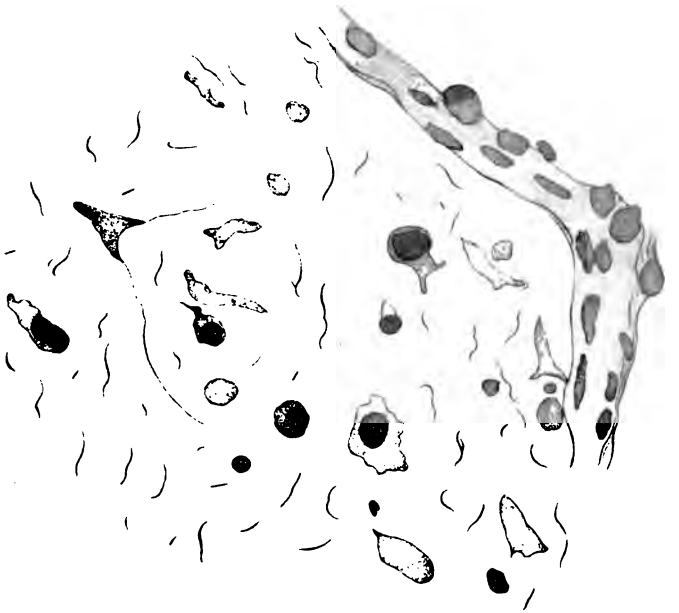
8



7

Edgar Thurston del. West, Newman & Co lith

See, Hypertrophus of Lupus, page 236.
A portion of a Section in G __. __ 's case
to show the Cells.



x 500

Connective-tissue Cells from G____'s Case.

G Thin del x 500 West Newman & Co lith

As seen in the Sections the cells do not present the somewhat epithelial type which is simulated in the drawing.

canal. In neither of them was there any evidence of lupus, or history of any inflammation or ulceration. Dr. Fleetwood Churchill in his work on diseases of women, described, under the title of "spasmodic stricture," two cases which seemed to him (Dr. Herman) to be of the same class.

Dr. MATTHEWS DUNCAN said that the subject was far from being exhausted. He entertained some hope of entering upon and laying before the Society the bibliography of the disease, its nomenclature and, still more important, its alliances.

A CASE OF SPURIOUS LABOUR.

By H. Roxburgh Fuller, M.A., M.B. Cantab.

Mrs. Lucy H—, a short, spare woman, æt. 31, became pregnant (as she supposed) for the fifth time in 1882. She had been married over eleven years, had borne four children and had never miscarried.

Her last child was born August 31st, 1881, and she suckled it until August 3rd, 1882. On that day she noticed a pink discharge, "like a birth show," and at the same time felt the movements of a child. In fact, as she said, she quickened. She at once weaned her baby. She had never conceived before whilst suckling, but knew such an event sometimes occurred; and she was sure of the fact in her own case, as she had suffered from morning sickness since April, though the idea of pregnancy had not suggested itself till the moment of the so-called quickening. The sickness ceased from this date.

She was somewhat at a loss to fix the date of her expected confinement, but in consultation with her friends settled January 3rd, 1883, as the probable day.

Cross-examination elicited that the sickness mentioned above was irregular, often absent for a day or two, and occurring at any time during the day. Also that the catamenia (absent from the birth of the child till the appearance of the "show" mentioned above in August) occurred natufally in September, scantily ten days later, and again at irregular intervals in October and November. She had heard that "women often saw something when carrying their children," so, in spite of the above and the fact that her abdomen had scarcely enlarged, her belief in her pregnancy remained unshaken, indeed, unquestioned.

She was annoyed by the occurrence of ordinary morning sickness in December, and by its persistence up to the

morning she was "taken in labour." In this month, too, the catamenia were absent.

On January 1st, 1883, labour commenced, according to the patient, with niggling pains in the stomach and thighs, which continued during the 2nd and 3rd inst., but on the 4th true labour came on. The pains became strong, frequent, and forcing; the "waters" soon broke, and she sent hurriedly to St. George's Hospital for assistance.

Nine hours later the student in attendance sent for me, as the Resident at the hospital, reporting that the patient was becoming exhausted, and that no progress had been made though the pains continued frequent and forcible. On my entering the room the patient volunteered the remark that she thought it was a cross birth, as she missed the pressure of the head felt in previous confinements.

On examination, I found the abdomen flat and universally resonant, indeed, absence of anything that could possibly be mistaken for the uterus at term was most marked. The vagina was moist and cool; the cervix uteri long, undilated, and in its normal position, though on the occurrence of each pain it was forced almost to the vaginal outlet, and at the same time the urine was voided. The rectum was empty. The mammæ free from milk, pendulous and shrivelled. The pains occurred every three to five minutes, and were typical of those seen towards the close of the second stage of labour.

Dr. Champneys kindly came down to see the case, and pointed out a circumstance I had overlooked, viz. that the indications of a six or seven weeks' gestation were present. This was confirmed seven months later by her confinement of a healthy child. At the moment, also, it explained the occurrence of the morning sickness in December. Dr. Champneys further undertook the task of convincing the patient as to her real condition; and this with some little trouble was effected.

Remarks.—The two chief points of interest in this case are: first, the maintenance for over five months of the

belief of pregnancy suddenly and powerfully impressed upon the mind, in spite of the absence of all the phenomena—save one—which the patient well knew accompanied that condition. This one exception—the supposed fœtal movements—is the only one, as Sir James Simpson pointed out, never absent in a case of pseudo-cyesis.

The second point of interest is the occurrence of true conception during the case. The patient was eight months pregnant, as she supposed, when she really conceived. The irregular monthly discharges ceased entirely, and morning sickness appeared in due course. Bnt it never occurred to the patient to question her condition, and the imitation of labour was produced at the time appointed. The symptoms were spread over four days, culminating on the fourth, and were only dispelled by the voice of one having authority. Yet the true gestation was not interfered with in the least; it proceeded to term and ended naturally. In contrast to this may be put Sir Crichton Browne's case of a woman over fifty years of age in whom the menopause had occurred four years previous to the time when she became convinced she was pregnant. Labour symptoms appeared at the time appointed, and after four days of, naturally, ineffectual pain, menstruation suddenly recommenced.

On the one hand, a very vivid belief had absolutely no effect upon the uterus, whilst on the other, to use Sir C. Browne's words, the "vivid belief had actually modified the circulation in the pelvic viscera, and caused them to resume a function which had been abolished in the order of nature."

Cases of pseudo-cyesis (excluding those of simple mistake) are by no means uncommon, but those in which spurious pregnancy is followed by spurious labour are very rare, if it be permitted to judge by the number of recorded cases. And this holds good even if those cases are excluded from consideration in which the case is prematurely terminated by consultation with a physician.

Cases of pseudo-cyesis may be classified under two

heads, the one as in my case, in which all signs of pregnancy, except the fœtal movements, are absent; the other in which the mammary signs and the sympathetic symptoms are more or less marked.

This distinction was first pointed out thirty years ago by Dr. Matthews Duncan, in the discussion upon Keiller's case at the Edinburgh Medico-Chirurgical Society. The same authority pointed out that the latter class—in which the sympathetic symptoms are present—is common, as Harvey first noticed, in animals; but he further pointed out that the former class, in which these symptoms are absent, is wholly confined to the human race. Both classes of cases often exhibit irregular vaginal discharges during their progress, and apparently terminate about equally often in spurious labour.

Subjoined is a list of cases of spurious labour to which I have found reference:

Dr. G. O. Heming. 'Lancet,' 1844, vol. i, p. 445.

Dr. W. B. Ryan. 'Lancet,' 1855, vol. i, p. 381.

Dr. Mallik. 'Lancet,' 1881, vol. i, p. 617.

Dr. Crichton Browne. 'Brit. Med. Journ.,' 1871, vol. ii, p. 113.

Dr. Keiller. 'Assoc. Med. Journ.,' 1854, p. 357.

Dr. Rigby. 'Med. Times and Gazette,' 1846, p. 330.

Mr. Close. 'Med. Times and Gazette,' 1846, p. 394.

Sir J. Simpson. 'Med. Times and Gazette,' 1859, p. 226.

Hervey's works, Syd. Soc. Ed., p. 527.

Lee's 'Practice of Midwifery,' Ed. 1844, p. 170.

Montgomery's 'Signs of Pregnancy,' Ed. 1856, p. 392, *et seq.*

Gooch. 'Diseases of Females,' New. Syd. Soc. Ed., p. 113, *et seq.*

More-Madden. 'Monograph on Spurious Pregnancy,' Case 1 (Falconer, Dublin).

Dr. Philip Jones said a patient of his, aged thirty-four years, consulted him for distressing morning sickness. There had been

cessation of the catamenia for four months, accompanied with increasing size of abdomen, which caused her to imagine she was pregnant. The symptoms continued until the end of the seventh month, when a severe attack of bronchitis occurred. A week afterwards the abdomen commenced diminishing in size, and after three weeks all symptoms of pregnancy had disappeared and the menses recurred.

Dr. GERVIS gave some particulars of two cases of spurious labour which he had seen, in one of which an elongated cervix was mistaken by the attendant for the foot of a child; and in the other the attendant had diagnosed a head presentation, the uterus being quite unenlarged, though active uterine pains were occurring.

Dr. CAMPBELL POPE had a case this year in which the patient was having strong labour pains at supposed full term. On examination the uterus was found to be of normal size and apparently unimpregnated. During the supposed pregnancy she was much troubled with morning sickness, felt movements and increased gradually in size. The increase in size was due to flatulent distension. The woman was not anxious to have a child. She was with difficulty persuaded that she was not in labour.

Dr. ROUTH said there were few obstetricians who had not had cases of spurious labour. He remembered two, which he had seen in early practice. Both believed themselves pregnant. In both the pains were regular, strong, marked, beginning in the back and passing into the hypogastrium as true labour pains. The pains were very regular and strong, and the uterus at each pain was nearly forced outwards, and the os when pressed upon by the index finger appeared to open slightly at each pain. In one there was a distinct show. These pains continued for several hours. At first it was thought a miscarriage might be pending, but as no progress was made a full dose of opium was given. Thereupon all the pains went, and did not again recur. Both these women, the one of very dark complexion, the other very fair, but under thirty years old, were very impressible and hysterical.

Dr. HERMAN said it was quite certain that spurious pregnancy was not simply a hysterical manifestation (as one speaker had said), for it occurred in the lower animals. The question of the causation of the spurious labour pains was of interest. It seemed reasonable to think that these pains, and the labour-like pains which occurred at the full term in extra-uterine gestation, were probably alike in kind and in mode of production. In extra-uterine gestation the uterus had been seen contracting when the abdomen was opened during the labour process. Cases related this evening showed that in labour from spurious pregnancy there was also uterine contraction.

Dr. CHAMPNEYS said that if cases of spurious labour were not

very rare, records of well-observed cases of spurious labour (as opposed to spurious pregnancy) were very rare. Dr. Fuller's case seemed to him to be the best case yet recorded. In this case the woman was not apparently hysterical, she was the mother of several children, and seemed merely to have been possessed by a false idea. The only thing which brought the labour to an end was an offer on his (the speaker's) part to adopt the child if born within four months; he dared not say longer on account of the signs of early pregnancy. Another point was that in this case (as in Dr. Gervis's) a mal-presentation—in this instance a presentation of the face—was diagnosed by the first attendant. He thought that evidence as to true uterine contractions must be entertained with great caution, and it must be remembered that the true uterine contractions in extra-uterine pregnancy, referred to by Dr. Herman, concern a uterus which, if not truly pregnant, is that of a pregnant woman.

Dr. GALABIN said that the most marked case of spurious labour which he had ever seen illustrated the effect of expectations upon the patient, and also the fact that spurious labour might sometimes be misleading as to diagnosis. A young woman was sent to Guy's Hospital from Wales, as a case of extra-uterine fœtation, or missed labour. There was a history of pregnancy extended some weeks beyond full term, not followed by delivery. Fœtal movements were said to have been felt, but had ceased. The abdomen was found to be occupied by a firm, irregular tumour. The os uteri was displaced out of reach forwards and upwards, and the pelvis was occupied by a round, hard mass, which, it was thought, might be the fœtal head. Both Dr. Braxton Hicks and himself were disposed to agree with the diagnosis of extra-uterine fœtation. One evening he was sent for and informed that the patient was in labour. He found that there were apparently vigorous pains. The vagina was relaxed with a considerable amount of lubricating secretions like that in labour; the os, which had not before been felt, could now be reached, and appeared to be slightly dilating. As it was thought just possible that a fœtus might be retained through malposition of the os, a tent was introduced to explore. The uterus was found to be empty; the pains passed off, and next day menstruation came on. The diagnosis of extra-uterine fœtation was thought to be rather confirmed by this spurious labour. As matters were quiescent it was decided not to interfere, and the patient went home. About three years after she returned. She gave the history that the tumour had gradually diminished for some time, but had lately increased again, and was now much larger than before. Some fluctuation was now felt in the abdominal portion of the tumour; the round mass behind the cervix remained as before. It was still thought that there might have been extra-uterine fœtation, and that fluid might have been

effused again into the sac, or that there might be complication with ovarian tumour. He had to operate at a few hours' notice, as the patient had sudden collapse and other symptoms which seemed to indicate rupture. Double ovarian tumour was found, the lower tumour nearly solid and adherent in the pelvis, but there was no rupture. The patient did well.

Dr. BOXALL said that about eighteen months ago a woman near the climacteric, who had had several children, presented herself at the General Lying-in Hospital, stating that she had gone a month over her time. The so-called labour pains appeared to be entirely abdominal, the result of gastric disturbance brought on by drink. To the same cause also the morning sickness, abdominal enlargement, and fœtal (?) movements were attributable, the enlargement being the result of flatulent distension, the movements of flatus in the intestine being mistaken for those of the fœtus. On examination, the uterus was found to be of natural size, and the sound passed a distance of two inches and a half.

INDEX.

PAGE

Abortion, missed, fœtus and membranes from a case of (Alban Doran) 224
Absence of the uterus and occlusion of the vagina (F. Bousquet) 123
Address (*Annual*) *of the President*, Henry Gervis, M.D., February 4th, 1885 64
—— (*Inaugural*) *of the new President*, J. B. Potter, M.D., March 4th, 1885 85
Aldred, Henry Allen, M.D., of Westbourne Park, W., obituary notice of 76
Annual General Meeting, February 4th, 1885 . . 45
Antiseptic system, the advantages of, in obstetric practice, as shown in the notes of a visit to some of the lying-in hospitals in the North of Europe (W. O. Priestley) . 197
Atrophy of chorion (G. E. Herman) . . . 195

Barraclough (R. W. S.), *Remarks* in discussion on S. D. Hine's paper on a case of obstructed labour in which spontaneous version followed an unsuccessful attempt to deliver by the crotchet after craniotomy . . . 295
Bousquet (F.), note on a case of absence of the uterus and occlusion of the vagina 123
Boxall (Robert), *Remarks* in discussion on H. R. Fuller's paper on a case of spurious labour 332
Broad ligament cyst with septa (W. S. A. Griffith) . . 251
Bye-laws, see *Laws*.

Calculus, urethral (Amand Routh) . . . 3
Cancerous cervix (C. Godson) 6
—— uterus, vaginal extirpation of (A. W. Edis) . . 2

PAGE

Cervix, see *Uterus* (cervix of).
CHAMPNEYS (F. H.), *Report* on rupture of the uterus, shown by Robert Harvey 228
—— *Remarks* in discussion on M. Handfield Jones' case of Porro's operation 4
—— —— in discussion on J. Knowsley Thornton's specimen of dermoid cysts of both ovaries . . . 47
—— —— in discussion on John Williams' paper on the circulation in the uterus, with some of its anatomical and pathological bearings 120
—— —— in discussion on F. Bousquet's note on a case of absence of the uterus and occlusion of the vagina . 128
—— —— in discussion on Alban Doran's specimen showing the relations of inflammation of the endometrium, Fallopian tube, ovary, and pelvic peritoneum . . 167
—— —— in discussion on John Williams' paper on serous perimetritis 184
—— —— in discussion on Robert Harvey's specimen of rupture of the uterus 193
—— —— in discussion on W. O. Priestley's notes of a visit to some of the lying-in hospitals in the North of Europe; and particularly on the advantages of the antiseptic system in obstetric practice 217
—— —— in discussion on John Williams' further note on the corroding ulcer of the os uteri . . . 304
—— —— in discussion on H. R. Fuller's paper on a case of spurious labour 330
Chancre of the cervix uteri (G. E. Herman) . . 252
Chorion, atrophy of (G. E. Herman) . . . 195
—— fibro-sarcoma of (A. L. Galabin) . . . 107
Circulation in the uterus, on the, with some of its anatomical and pathological bearings (John Williams) . . 112
CLEVELAND (W. F.), *Remarks* in discussion on Alban Doran's specimen showing the relations of inflammation of the endometrium, Fallopian tube, ovary, and pelvic peritoneum 168
—— —— in discussion on John Williams' paper on serous perimetritis 183
Corroding ulcer of the os uteri [see vol. xxvi, p. 60], further note on (John Williams) 300
Craniotomy, case of obstructed labour in which spontaneous version followed an unsuccessful attempt to deliver by the crotchet after (S. D. Hine) 293

PAGE
Cuolahan, Hugh, M.D., of Bermondsey, obituary notice of . 75
Cysts, see *Ovarian.*
—— see *Tumours.*

Davis, John Hall, M.D., of Gloucester Place, W., obituary notice of 74
DAY (W. Hankes), case of fibroid tumour complicating delivery treated by enucleation 158
Dermoid cysts of both ovaries (J. Knowsley Thornton) . 46
—— —— of the pelvis, on the suppuration and discharge into mucous cavities of (G. E. Herman) . . . 254
—— ovarian cyst, malignant (J. Knowsley Thornton) . 194
Distension of uterus from partial obstruction of cervix (A. L. Galabin) 81
DORAN (Alban), *Report* on rupture of the uterus shown by Robert Harvey 228
—— —— on specimen of supposed extra-uterine gestation with birth through uterus shown by E. F. Grün . . 306
—— fœtus and membranes from a case of missed abortion (shown) 224
—— specimen showing the relations to each other of inflammation of the endometrium, Fallopian tube, ovary, and pelvic peritoneum (shown) 164
—— *Remarks* in discussion on W. A. Duncan's paper on extirpation of the entire uterus 41
—— —— in discussion on P. Horrocks' specimen of malformed fœtus 132
—— —— in discussion on E. Malins' specimen of double pyosalpinx 138
—— —— in discussion on John Williams' paper on serous perimetritis 182
—— —— in discussion on W. S. A. Griffith's specimen of broad ligament cyst with septa 252
—— —— in discussion on G. E. Herman's paper on the suppuration and discharge into mucous cavities of dermoid cysts of the pelvis 290
—— —— in discussion on A. H. N. Lewers' specimen of double pyosalpinx with rupture of the Fallopian tubes . . 299
Double pyosalpinx (E. Malins) 137
DUNCAN (Matthews), on the ulceration of lupus of the female generative organs, including perforations, pits, and excavations 139

PAGE

DUNCAN (Matthews), *Remarks* in reply . . . 157
—— —— on the hypertrophy of lupus of the female generative organs 230
—— *Remarks* in reply 248
—— and GEORGE THIN, on the inflammations of lupus of the pudendum, with histological observations and remarks on lupus 310, 315
—— *Remarks* in reply 325
—— —— in discussion on J. Knowsley Thornton's specimen of dermoid cysts of both ovaries . . . 47
—— —— in discussion on John Williams' paper on serous perimetritis 183
—— —— in discussion on W. O. Priestley's notes of a visit to some of the lying-in hospitals in the North of Europe; and particularly on the advantages of the antiseptic system in obstetric practice. 214
DUNCAN (William A.), on extirpation of the entire uterus . 8
—— *Remarks* in reply 104
—— —— in discussion on F. A. Purcell's case of vaginal hysterectomy 6
—— —— in discussion on D. McKeown's paper on Ophthalmia neonatorum and its ravages . . . 56
—— —— in discussion on John Williams' paper on the circulation in the uterus, with some of its anatomical and pathological bearings 120
—— —— in discussion on Matthews Duncan's paper on the hypertrophy of lupus of the female generative organs . 248

EDIS (A. W.), vaginal extirpation of cancerous uterus (shown) 2
—— *Remarks* in discussion on W. A. Duncan's paper on extirpation of the entire uterus 103
Elections of New Fellows . . . 1, 45, 81, 131, 191, 223, 251, 297
Electrical light (Heywood Smith) 3
Endometrium, specimen showing the relations to each other of inflammation of the, Fallopian tube, ovary, and pelvic peritoneum (Alban Doran) 164
Extirpation of the entire uterus (W. A. Duncan) . . 8
—— vaginal, of cancerous uterus (A. W. Edis) . . 2
Extra-uterine gestation (W. S. A. Griffith) . . . 304
—— —— (H. Campbell Pope) 304
—— —— supposed, with birth through uterus (E. F. Grün) . 226

PAGE
Fallopian tubes, double pyosalpinx with rupture of (A. H. N. Lewers) 298
—— specimen showing the relations to each other of inflammation of the endometrium, Fallopian tube, ovary, and pelvic peritoneum (Alban Doran) . . . 164
Fellows, see *Lists, Election.*
Fœtation, see *Pregnancy.*
Fœtus, malformed (P. Horrocks) . . . 131
—— and membranes from a case of missed abortion (Alban Doran) 224
Fibroid, see *Tumours* (fibroid).
Fibro-sarcoma of chorion (A. L. Galabin) . . . 107
Fuller (H. Roxburgh), a case of spurious labour . . 326

Galabin (A. L.), distension of uterus from partial obstruction of cervix (shown) 81
—— fibro-sarcoma of chorion, microscopic sections of (shown) 107
—— for *Lewis Jones*, female twin monster (shown) . . 305
—— *Remarks* in discussion on W. A. Duncan's paper on extirpation of the entire uterus 101
—— —— in discussion on John Williams' paper on the circulation in the uterus, with some of its anatomical and pathological bearings 118
—— —— in discussion on John Williams' paper on serous perimetritis 184
—— —— in discussion on Matthews Duncan's paper on the hypertrophy of lupus of the female generative organs 245
—— —— in discussion on G. E. Herman's paper on the suppuration and discharge into mucous cavities of dermoid cysts of the pelvis 291
—— —— in discussion on H. R. Fuller's paper on a case of spurious labour 331
Gandy (Wm.), *Remarks* in discussion on Matthews Duncan's paper on the ulceration of lupus of the female generative organs 157
—— —— in discussion on Matthews Duncan's paper on the hypertrophy of lupus of the female generative organs 248
Gervis (Henry), pessaries of glycerine and gelatine (shown) . 163
—— *Remarks* in discussion on W. A. Duncan's paper on extirpation of the entire uterus 38

PAGE

GERVIS (Henry), *Remarks* in discussion on Alban Doran's specimen showing the relations of inflammation of the endometrium, Fallopian tube, ovary, and pelvic peritoneum 166

—— —— in discussion on John Williams' paper on serous perimetritis 182

—— —— in discussion on E. F. Grün's case of supposed extra-uterine gestation with birth through uterus . . 227

—— —— in discussion on Matthews Duncan's paper on the hypertrophy of lupus of the female generative organs 248

—— —— in discussion on H. R. Fuller's paper on a case of spurious labour 330

Gestation, see *Pregnancy*.

GIBBONS (R. A.), *Remarks* in discussion on W. O. Priestley's notes of a visit to some of the lying-in hospitals in the North of Europe; and particularly on the advantages of the antiseptic system in obstetric practice . . . 219

GODSON (Clement), cancerous cervix (shown) . . 6

—— *Remarks* in discussion on John Williams' paper on serous perimetritis 183

GRIFFITH (John T.), *Remarks* in discussion on S. D. Hine's paper on a case of obstructed labour in which spontaneous version followed an unsuccessful attempt to deliver by the crotchet after craniotomy 296

GRIFFITH (W. S. A.), broad ligament cyst with septa (shown) 251

—— extra-uterine gestation (shown) 304

—— notes of a specimen of the pseudo-osteo-malacic pelvis of Naegele 186

—— serous perimetritis (shown) 168

—— *Remarks* in discussion on F. Bousquet's note on a case of absence of the uterus and occlusion of the vagina . 128

—— —— in discussion on P. Horrocks' cases of imperforate rectum 137

—— —— in discussion on Alban Doran's specimen showing the relations of inflammation of the endometrium, Fallopian tube, ovary, and pelvic peritoneum . . 167

—— —— in discussion on John Williams' paper on serous perimetritis 183

GRÜN (E. F.), case of supposed extra-uterine gestation with birth through uterus (shown) 226

PAGE
HARVEY (Robert), rupture of the uterus (shown) . . 191
—— —— *Remarks* in discussion on W. O. Priestley's notes of a visit to some of the lying-in hospitals in the North of Europe; and particularly on the advantages of the antiseptic system in obstetric practice . . . 221
HERMAN (G. E.), *Report* on specimen of supposed extra-uterine gestation with birth through uterus, shown by E. F. Grün 306
—— atrophy of chorion (shown) 195
—— chancre on the cervix uteri, drawing of (shown) . 252
—— inverted uterus (shown) 83
—— on the suppuration and discharge into mucous cavities of dermoid cysts of the pelvis 254
—— *Remarks* in reply 292
—— —— in discussion on A. L. Galabin's specimen of distension of uterus from partial obstruction of cervix . 83
—— —— in discussion on James Murphy's paper on the sequel to a case of ovariotomy 111
—— —— in discussion on John Williams' paper on the circulation in the uterus, with some of its anatomical and pathological bearings 118
—— —— in discussion on Matthews Duncan's and G. Thin's paper on the inflammations of lupus of the pudendum, with histological observations and remarks on lupus . 324
—— —— in discussion on H. R. Fuller's paper on a case of spurious labour 330
HEWITT (Graily), *Remarks* in discussion on D. McKeown's paper on ophthalmia neonatorum and its ravages . 56
—— —— in discussion on W. A. Duncan's paper on extirpation of the entire uterus 96
—— —— in discussion on John Williams' paper on the circulation in the uterus, with some of its anatomical and pathological bearings 117
—— —— in discussion on Alban Doran's specimen showing the relations of inflammation of the endometrium, Fallopian tube, ovary, and pelvic peritoneum . . 168
—— —— in discussion on John Williams' paper on serous perimetritis 183
—— —— in discussion on W. A. Thomson's paper on a case of protracted pregnancy 309
Hickinbotham, James, M.D., of Birmingham, obituary notice of 74

PAGE

HICKS (J. Braxton), *Remarks* in discussion on W. A. Duncan's paper on extirpation of the entire uterus . . 38
—— —— in discussion on W. Hankes Day's case of fibroid tumour complicating delivery treated by enucleation . 161
—— —— in discussion on W. O. Priestley's notes of a visit to some of the lying-in hospitals in the North of Europe; and particularly on the advantages of the antiseptic system in obstetric practice 220
—— —— in discussion on G. E. Herman's paper on the suppuration and discharge into mucous cavities of dermoid cysts of the pelvis 290
HINE (S. D.), case of obstructed labour, in which spontaneous version followed an unsuccessful attempt to deliver by the crotchet after craniotomy 293
Histological observations and remarks on lupus (G. Thin) . 315
HORROCKS (P.), malformed fœtus (shown) . . . 131
—— two cases of imperforate rectum (shown) . . 135
—— *Remarks* in discussion on E. Malins' specimen of double pyosalpinx 138
—— —— in discussion on Matthews Duncan's paper on the ulcerations of lupus of the female generative organs . 156
—— —— in discussion on Matthews Duncan's paper on the hypertrophy of lupus of the female generative organs . 248
HUTCHINSON (Jonathan), *Remarks* in discussion on Matthews Duncan's paper on the hypertrophy of lupus of the female generative organs 243
Hypertrophy of lupus, on the, of the female generative organs (Matthews Duncan) 230
Hysterectomy, vaginal (F. A. Purcell) . . . 5

Imperforate rectum, two cases of (P. Horrocks) . . 135
Inflammations, on the, of lupus of the pudendum (Matthews Duncan) 310
Inverted uterus (G. E. Herman) 83

JONES (Lewis), see *Galabin*.
JONES (M. Handfield), Porro's operation, uterus and fibroid tumour (shown) 4
JONES (Philip), *Remarks* in discussion on H. R. Fuller's paper on a case of spurious labour 329

PAGE

Labour, see *Parturition.*

Lanchester, Henry Thomas, M.D., of Croydon, obituary notice of 77

Lawrence (Aust), *Remarks* in discussion on John Williams' paper on the circulation in the uterus, with some of its anatomical and pathological bearings 119

—— —— in discussion on S. D. Hine's paper on a case of obstructed labour in which spontaneous version followed an unsuccessful attempt to deliver by the crotchet after craniotomy 296

Laws, alteration of Chapter I 58

—— —— of Chapter XV 58

—— —— of Chapter XVI 59

Lewers (A. H. N.), double pyosalpinx with rupture of the Fallopian tubes (shown) 298

Library, hours of attendance at lxiv

List of Officers elected for 1885 60

—— *of ditto for* 1886 v

—— *of past Presidents* vii

—— *of Referees of Papers for* 1886 viii

—— *of Standing Committees* ix

—— *of Honorary Local Secretaries* x

—— *of Honorary Fellows* xi

—— *of Corresponding Fellows* xiii

—— *of Ordinary Fellows* xiv

—— *of Deceased Fellows* [with obituary notices, which see] 74—77

Lupus, histological observations and remarks on (G. Thin) . 315

—— of the pudendum, on the inflammations of (Matthews Duncan) 310

—— on the hypertrophy of, of the female generative organs (Matthews Duncan) 230

—— on the ulceration of, of the female generative organs, including perforations, pits, and excavations (Matthews Duncan) 139

Lydall, Wykeham H., L.R.C.P. Ed., of Mecklenburgh Square, W.C., obituary notice of 76

Lying-in hospitals, notes of a visit to some of the, in the North of Europe; and particularly on the advantages of the antiseptic system in obstetric practice (W. O. Priestley) . 197

McKeown (David), the prevention of ophthalmia neonatorum and its ravages 49

PAGE
Malformation, female twin monster (A. L. Galabin) . . 305
—— malformed fœtus (P. Horrocks) . . . 131
Malignant dermoid ovarian cyst (J. Knowsley Thornton) . 194
MALINS (Edward), double pyosalpinx (shown) . . 137
—— *Remarks* in discussion on P. Horrocks' cases of imperforate rectum 137
Membranes and fœtus from a case of missed abortion (Alban Doran) 224
Missed abortion, fœtus and membranes from a case of (Alban Doran) 224
Monster, female twin (A. L. Galabin) . . . 305
MURPHY (James), sequel to a case of ovariotomy . . 108
—— *Remarks* in discussion on W. O. Priestley's notes of a visit to some of the lying-in hospitals in the North of Europe; and particularly on the advantages of the antiseptic system in obstetric practice. 219
MURRAY (G. C. P.), *Remarks* in discussion on John Williams' paper on the circulation in the uterus, with some of its anatomical and pathological bearings . . . 120

Naegele, notes of a specimen of the pseudo-osteo-malacic pelvis of (W. S. A. Griffith) 186

Obituary notices of deceased Fellows.
Hickinbotham, James, M.D., Birmingham . . 74
Davis, John Hall, M.D., Gloucester Place, W. . . 74
Richardson, Richard, L.R.C.P. Ed., Rhayader . . 75
Cuolahan, Hugh, M.D., Bermondsey . . . 75
Westmacott, John Guise, M.D., Paddington, W. . 76
Sharman, Malim, Birmingham . . . 76
Aldred, Henry Allen, M.D., Westbourne Park, W. . 76
Lydall, Wykeham H., L.R.C.P. Ed., Mecklenburgh Square, W.C. 76
Lanchester, Henry Thomas, M.D., Croydon . . 77
Obstetric practice, the advantages of the antiseptic system in, as shown in the notes of a visit to some of the lying-in hospitals in the North of Europe (W. O. Priestley) . 197
Occlusion of the vagina and absence of the uterus (F. Bousquet) 123
Ophthalmia neonatorum, the prevention of, and its ravages (D. McKeown) 49
Ovarian dermoid cyst, malignant (J. Knowsley Thornton) . 194

PAGE
Ovaries, dermoid cysts of both (J. Knowsley Thornton) . 46
Ovariotomy, sequel to a case of (James Murphy) . . 108
Ovary, specimen showing the relations to each other of inflammation of the endometrium, Fallopian tube, ovary, and pelvic peritoneum (Alban Doran) . . . 164

Parturition, see *Placenta*.
—— a case of spurious labour (H. R. Fuller) . . 326
—— a case of fibroid tumour complicating delivery treated by enucleation (W. Hankes Day) . . . 158
—— case of obstructed labour in which spontaneous version followed an unsuccessful attempt to deliver by the crotchet after craniotomy (S. D. Hine) . . . 293
Pelvis, notes of a specimen of the pseudo-osteo-malacic pelvis of Naegele (W. S. A. Griffith) . . . 186
—— dermoid cysts of the, on the suppuration and discharge into mucous cavities of (G. E. Herman) . . 254
Perimetritis, serous (W. S. A. Griffith) . . . 168
—— —— (John Williams) 169
Peritoneum, specimen showing the relations to each other of inflammation of the endometrium, Fallopian tube, ovary, and pelvic peritoneum (Alban Doran) . . . 164
Pessaries of glycerine and gelatine (H. Gervis) . . 163
Playfair (W. S.), *Remarks* in discussion on W. A. Duncan's paper on extirpation of the entire uterus . . 42
—— —— in discussion on W. O. Priestley's notes of a visit to some of the lying-in hospitals in the north of Europe; and particularly on the advantages of the antiseptic system in obstetric practice 218
—— —— in discussion on Matthews Duncan's paper on the hypertrophy of lupus of the female generative organs . 244
—— —— in discussion on G. E. Herman's paper on the suppuration and discharge into mucous cavities of dermoid cysts of the pelvis 291
—— —— in discussion on S. D. Hine's paper on a case of obstructed labour, in which spontaneous version followed an unsuccessful attempt to deliver by the crochet after craniotomy 296
Pope (H. Campbell) extra-uterine gestation . . 304
—— *Remarks* in discussion on H. R. Fuller's paper on a case of spurious labour 330

PAGE

Porro's operation, uterus and fibroid tumour (M. Handfield Jones) 4
Pregnancy, case of protracted (W. A. Thomson) . . 308
—— case of supposed extra-uterine gestation with birth through uterus (E. F. Grün) 226
—— extra-uterine gestation (W. S. A. Griffith) . . 304
—— —— —— (H. Campbell Pope) . . . 304
—— fœtus and membrane from a case of missed abortion (Alban Doran) 224
Priestley (Wm. O.) notes of a visit to some of the lying-in hospitals in the North of Europe; and particularly on the advantages of the antiseptic system in obstetric practice . 197
—— *Remarks* in reply 221
—— —— in discussion on W. A. Duncan's paper on extirpation of the entire uterus 97
—— —— in discussion on G. E. Herman's specimen of atrophy of chorion 196
Protracted pregnancy, case of (W. A. Thomson) . . 308
Pudendum, on the inflammations of lupus of the (Matthews Duncan) 310
Purcell (F. A.), vaginal hysterectomy (shown) . . 5
Pyosalpinx, double (E. Malins) 137
—— —— with rupture of the Fallopian tubes (A. H. N. Lewers) 298

Receipts and Expenditure of the Society 61
Rectum, imperforate, two cases of (P. Horrocks) . . 135
Report (audited) of the Treasurer for 1884 . . . 61
—— *of the Hon. Librarian for* 1884 . . . 60
—— *of the Chairman of the Board for the Examination of Midwives* 62
—— *of Committee on rupture of the uterus, shown by Robert Harvey, July 1st,* 1885 228
—— —— *on specimen of supposed extra-uterine gestation, with birth through uterus, shown by E. F. Grün on October 7th,* 1885 306
Richardson, Richard, L.R.C.P. Ed., of Rhayader, obituary notice of 75
Robertson (W. B.), *Remarks* in discussion on S. D. Hine's paper on a case of obstructed labour in which spontaneous version followed an unsuccessful attempt to deliver by the crotchet after craniotomy 295

PAGE

ROUTH (Amand), urethral calculus (shown) . . 3
—— *Remarks* in discussion on F. Bousquet's note on a case of absence of the uterus and occlusion of the vagina . 128
ROUTH (C. H. F.), *Remarks* in discussion on J. Knowsley Thornton's specimen of dermoid cysts of both ovaries . 47
—— —— in discussion on F. Bousquet's note on a case of absence of the uterus and occlusion of the vagina . 127
—— —— in discussion on P. Horrocks' cases of imperforate rectum 136
—— —— in discussion on Alban Doran's specimen showing the relations of inflammation of the endometrium, Fallopian tube, ovary, and pelvic peritoneum . . 166
—— —— in discussion on G. E. Herman's paper on the suppuration and discharge into mucous cavities of dermoid cysts of the pelvis 290
—— —— in discussion on H. R. Fuller's paper on a case of spurious labour 330
Rupture of the Fallopian tubes, with pyosalpinx (A. H. N. Lewers) 298
—— of the uterus (Robert Harvey) 191

Septa, broad ligament cyst with (W. S. A. Griffith) . . 251
Sequel to a case of ovariotomy (James Murphy) . . 108
Serous perimetritis (W. S. A. Griffith) . . . 168
—— —— (John Williams) 169
Sharman, Malim, of Birmingham, obituary notice of . 76
SMITH (Heywood), new electrical light (shown) . . 3
Spurious labour, a case of (H. R. Fuller) . . . 326

THIN (George), histological observations and remarks on lupus 315
—— *Remarks* in discussion on Matthews Duncan's paper on the hypertrophy of lupus of the female generative organs. 245
THOMSON (W. Arnold), case of protracted pregnancy . 308
THORNTON (J. Knowsley), dermoid cysts of both ovaries (shown) 46
—— *Remarks* in reply 48
—— malignant dermoid ovarian cyst (shown) . . 194
—— *Remarks* in discussion on W. A. Duncan's paper on extirpation of the entire uterus 40
—— —— in discussion on John Williams' paper on serous perimetritis 181

PAGE

THORNTON (J. Knowsley), *Remarks* in discussion on G. E. Herman's paper on the suppuration and discharge into mucous cavities of dermoid cysts of the pelvis . . 289
Tumour, broad ligament cyst with septa (W. S. A. Griffith) . 251
—— dermoid cyst, malignant (J. Knowsley Thornton) . 194
—— —— of both ovaries (J. Knowsley Thornton) . . 46
—— —— of the pelvis, on the suppuration and discharge into mucous cavities of (G. E. Herman) . . . 254
—— fibroid, complicating delivery treated by enucleation (W. Hankes Day) 158
—— —— and uterus in a case of Porro's operation (M. Handfield Jones) 4
—— fibro-sarcoma of chorion (A. L. Galabin) . . 107
—— malignant, dermoid ovarian cyst (J. Knowsley Thornton) 194
—— sequel to a case of ovariotomy (James Murphy) . 108
Twin monster, female (A. L. Galabin) . . . 305

Ulcer, corroding, of the os uteri [see vol. xxvi, p. 60], further note on (John Williams) 300
Ulceration of lupus, on the, of the female generative organs, including perforations, pits, and excavations (Matthews Duncan) 139
Urethral calculus (Amand Routh) . . . 3
Uterus, see *Hysterectomy*.
—— absence of, and occlusion of the vagina (F. Bousquet) . 123
—— case of supposed extra-uterine gestation with birth through the (E. F. Grün) 226
—— on the circulation in the, with some of its anatomical and pathological bearings (John Williams) . . 112
—— distension of, from partial obstruction of cervix (A. L. Galabin) 81
—— entire, extirpation of (W. A. Duncan) . . . 8
—— inverted (G. E. Herman) 83
—— rupture of the (Robert Harvey) . . . 191
—— and fibroid tumour in a case of Porro's operation (M. Handfield Jones) 4
—— cancerous cervix (C. Godson) . . . 6
—— —— vaginal extirpation of (A. W. Edis) . . 2
—— cervix uteri, chancre of the (G. E. Herman) . . 252
—— os uteri, on the corroding ulcer of the [see vol. xxvi, p. 60], further note on (John Williams) . . . 300

PAGE
Vagina, occlusion of, and absence of the uterus (F. Bousquet) 123
Vaginal extirpation of cancerous uterus (A. W. Edis) . 2
—— hysterectomy (F. A. Purcell) . . . 5
Version, spontaneous, in a case of obstructed labour preceded by an unsuccessful attempt to deliver by the crotchet after craniotomy (S. D. Hine) 293

Wells (Sir T. Spencer), *Remarks* in discussion on W. A. Duncan's paper on extirpation of the entire uterus . 93
West (Charles), *Remarks* in discussion on W. O. Priestley's notes of a visit to some of the lying-in hospitals in the North of Europe; and particularly on the advantages of the antiseptic system in obstetric practice . . 217
—— —— in discussion on Matthews Duncan's paper on the hypertrophy of lupus of the female generative organs . 247
Westmacott, John Guise, M.D., of Paddington, W., obituary notice of 76
Williams (John), further note on the corroding ulcer of the os uteri [see vol. xxvi, p. 60] 300
—— —— on serous perimetritis 169
—— *Remarks* in reply 185
—— on the circulation in the uterus, with some of its anatomical and pathological bearings . . . 112
—— *Remarks* in reply 120
—— —— in discussion on W. A. Duncan's paper on extirpation of the entire uterus 38
—— —— in discussion on F. Bousquet's note on a case of absence of the uterus and occlusion of the vagina . 127
—— —— in discussion on Alban Doran's specimen showing the relations of inflammation of the endometrium, Fallopian tube, ovary, and pelvic peritoneum . . 168
—— —— in discussion on W. O. Priestley's notes of a visit to some of the lying-in hospitals in the North of Europe; and particularly on the advantages of the antiseptic system in obstetric practice 216

OBSTETRICAL SOCIETY.

ADDITIONS TO THE LIBRARY

BY DONATION OR PURCHASE DURING THE YEAR 1885.

	Presented by
AHLFELD (F.). Berichte und Arbeiten aus der geburtshilflich-gynaekologischen Klinik zu Marburg, 1883—1884. Band ii. See *Reports*. *plates and woodcuts*, 8vo. Leipzig, 1885	Author.
ALLOWAY (T. Johnson). On the Treatment of Puerperal Septicæmia by a new method—intra-uterine suppositories of Iodoform. (Ext. 'Canada Med. and Surg. Journ.,' April, 1883.) 8vo. 1883.	Ditto.
——— On Puerperal Fever. (Ext. 'Canada Med. and Surg. Journ.,' March, 1884.) 8vo. 1884	Ditto.
——— Missed Abortion. (Ext. 'Canada Med. and Surg. Journ.,' December, 1884.) 8vo. Montreal, 1884	Ditto.
BARNES (Robert) and FANCOURT BARNES. A System of Obstetric Medicine and Surgery, theoretical and clinical, for the Student and Practitioner, vol. ii. *woodcuts*, 8vo. Lond. 1885	Purchased.
BAYER (H.). Morphologie der Gebärmutter: *Freund*, Gynäkologische Klinik, Band i. 1885	
BELLUZZI (Cesare). Contributo allo studio del Parto per la Fronte. *plate*, 4to. Bologna, 1884	Author.
BENNET (James Henry). A Practical Treatise on Inflammation of the Uterus, its Cervix and Appendages. Fourth edition. 8vo. Lond. 1861	Ditto.
——— Winter and Spring on the shores of the Mediterranean. Fifth edition. *maps and plates*, 8vo. Lond. 1875	Ditto.

	Presented by
BENNET (James Henry). Nutrition in Health and Disease; a Contribution to Hygiene and to Clinical Medicine. Third edition. 8vo. Lond. 1877	Author.
——— On the Treatment of Pulmonary Consumption by Hygiene, Climate, and Medicine. Third edition. 8vo. Lond. 1878	Ditto.
BOISSARD (Alphonse). De la forme de l'Excavation pelvienne. *plates*, 4to. Paris, 1884	Purchased.
BONNAIRE (Erasme). Recherches Anatomiques et Anatomo-pathologiques sur le Broiement de la Tête fœtale. *diagrams*, 8vo. Paris, 1885	Ditto.
BUDIN (Pierre). Obstétrique et Gynécologie, Recherches cliniques et expérimentales. *plates and woodcuts*, 8vo. Paris, 1886	Author.
BUMM (Ernst.). Der Mikro-organismus der gonorrhoischen Schleimhauterkrankungen "Gonococcus-Neisser." *plates*, 8vo. Wiesbaden, 1885	Purchased.
Catalogue of the Library of the Royal Medical and Chirurgical Society of London. Supplement III. Additions to the Library, 1883—84. 8vo. Lond. 1885	Society.
Catalogue of Books added to the Radcliffe Library during 1884. 4to. Oxford, 1885	Sir H. W. Acland, K.C.B.
CHAUMONT (F. S. B. François de). See *Parkes*.	
CHEYNE (W. Watson). Antiseptic Surgery, its principles, practice, history, and results. *woodcuts*, 8vo. Lond. 1882	Purchased.
——— Manual of the Antiseptic Treatment of Wounds. *woodcuts*, 8vo. Lond. 1885	Ditto.
CHIARI (H.). Ueber die typographischen Verhältnisse des Genitales einer inter partum verstorbenen Primipara. *plates*, 4to. Wien, 1885	Ditto.
CRIPPS (Harrison). On Diseases of the Rectum and Anus, including a portion of the Jacksonian Prize Essay on Cancer. *plates*, 8vo. Lond. 1884	Ditto.
CULLINGWORTH (Charles J.). On the operation for Rupture of the Female Perineum. ('Med. Chron.' Nov. and Dec., 1884). *woodcuts*, 8vo. 1884	Author.
DAY (William Henry). On the Diseases of Children. Second edition. 8vo. Lond. 1885	Ditto.

Presented by

DE CRISTOFORIS (Malachia). Il Jodoformio in confronto cogli astringenti e coi cauterizzanti nella Medicazione Endouterina. Lettera al Professore Pietro Pellizzari. 8vo. Milano, 1879 — Author.

Dictionnaire Encyclopédique des Sciences Médicales. — Purchased.

1re série, Tom. XXXI, XXXII, XXXIII, 1e partie.
2me „ „ XXI, XXII, 1e partie.
3me „ „ XV.
4me „ „ X, 2me partie.

DWIGHT (Thomas). Frozen Sections of a Child. *plates*, sm. fo. New York, 1881 — Ditto.

EMMET (Thomas Addis). The Principles and Practice of Gynæcology. Third edition. *woodcuts*, 8vo. Lond. 1885 — Ditto.

FREUND (Wilhelm Alexander). Gynäkologische Klinik. Band i. 8vo. (*and Atlas* 4to.) Strassburg, 1885 — Ditto.

Ueber das sogenannte kyphotische Becken *W. A. Freund.*
Die Verletzungen der Scheide und des Dammes *W. A. Freund.*
Das Bindegewebe im weiblichen Becken *W. A. Freund.*
Morphologie der Gebärmutter *H. Bayer.*
Lagerung des Eies im Uterus *Dr. Homburger.*

FÜRST (Camillo). Die Antisepsis bei Schwangeren, Gebärenden und Wöchnerinnen mit einem Anhange über den Gebrauch von Quecksilberchlorid als Disinfectionsmittel in der Geburtshilfe. 8vo. Wien, 1885 — Ditto.

GAUTIER (V.). De la Menstruation et de la Maturité précoces des Hémorragies Génitales des petites filles. *plate*, 8vo. Genève, 1884 — Author.

GOODHART (James Frederic). The Student's Guide to Diseases of Children. 12mo. Lond. 1885 — Purchased.

HART (D. Berry). Contribution to the Topographical and Sectional Anatomy of the female Pelvis. *plates*, 4to. Edin. 1885 — Ditto.

HEGAR (Alfred). Der Zusammenhang der Geschlechtskrankheiten mit nervosen Leiden und die Castration bei neurosen. 8vo. Stuttgart, 1885 — Ditto.

HIS (Wilhelm). Anatomie menschlicher Embryonen. *woodcuts*, 8vo. (*and Atlas* fol.) Leipzig, 1885 — Ditto.

III. Zur Geschichte der Organe.

HOMBURGER (Dr.). Lagerung des Eies im Uterus: *Freund*, Gynäkologische Klinik, Band i. 1885

Presented by

KEITH (Thomas). Contributions to the Surgical Treatment of Tumours of the Abdomen.
8vo. Edin. 1885 Purchased.

Part 1.—Hysterectomy for Fibrous Tumours of the Uterus.

LANDAU (Leopold). Die Wanderleber und der Hängebauch der Frauen.
woodcuts, 8vo. Berlin, 1885 Ditto.

LECORCHÉ ( ). Du Diabète Sucré chez la femme.
8vo. Paris, 1886 Ditto.

LUSK (William Thompson). The Science and Art of Midwifery. Third edition.
illustrations, 8vo. New York, 1885 Author.

MCKEE (E. S.). Membrana Virginatatis. ('Nashville Journ. of Med. and Surg.,' November, 1884.)
8vo. 1884 Ditto.

——— Irregular Contraction of the Uterus. ('Columbus Med. Journ.,' December, 1884.)
8vo. 1884 Ditto.

MARTIN (A.). Ueber die Stielversorgung nach Myomoperationen. ('Berl. klin. Wochenschr.' 1885, No. 3.) 8vo. Berlin, 1885 Ditto.

——— Castration der Frauen. 8vo. Wien, 1885 Ditto.

MARTIN-SAINT-ANGE (G. J.). Iconographie pathologique de l'Œuf Humain fécondé en rapport avec l'étiologie de l'Avortement.
plates, 4to. Paris, 1884 Purchased.

MUNDÉ (Paul F.). Minor Surgical Gynecology. Second Edition. *woodcuts*, 8vo. New York, 1885 Ditto.

PARKER (Robert William). Tracheotomy in Laryngeal Diphtheria, after-treatment, and complications, Second edition. 8vo. Lond. 1885 Author.

PARKER (Robert William) and S. G. SHATTOCK. The Pathology and Etiology of Congenital Club-foot. ('Trans. Path. Soc.,' Lond.)
plates, 8vo. Lond. 1884 Authors.

PARKES (Edmund A.). A Manual of practical Hygiene. Sixth edition. Edited by F. S. B. François de Chaumont.
plates and woodcuts, 8vo. Lond. 1883 Purchased.

PEÁN (J.). Diagnostic et traitement des Tumeurs de l'Abdomen et du Bassin. Vol. ii.
woodcuts, 8vo. Paris, 1885 Ditto.

Presented by

PIPPINGSKJÖLD (J.). De la nouvelle Maternité de Helsingfors en Finlande. MS. 4to. Dr. Priestley.

RICHARDSON (William L.). Diagnosis and Treatment of posterior positions of the Occiput. 8vo. 1885 Author.

ROOSE (Robson). Gout, and its relations to diseases of the Liver and Kidneys. 8vo. Lond. 1885 Ditto.

RUNGE (Max). Die Krankheiten der ersten Lebenstage. 8vo. Stuttgart, 1885 Purchased.

SCHULTZE (Bernhard Sigmund). Anleitung zur Wendung auf den Fuss und zum Gebrauch der Geburtszange für die zur Ausführung der genannten Operationen ausdrüchlich berechtigen Hebammen. 8vo. Leipzig, 1885 Ditto.

SHATTOCK (Samuel George), see *Parker*.

SIRIGNANO (Giosuè). Patologia della Gravidanza. I. Malattie dell' Uovo Gravidanza estra-uterina. la 8vo. Napoli, 1884 Author.

THORBURN (John). A practical Treatise on the Diseases of Women. *plate and woodcuts*, 8vo. Lond. 1885 Dr. John Williams.

THORN (W.). Ein Wort gegen die jetzt übliche Art der Anwendung des Sublimats in der Geburtshilfe. ('Volkmann's Sammlung,' No. 250.) 8vo. Leipzig, 1885 Purchased.

VEIT (J.). Ueber Endometritis decidua. ('Volkmann's Sammlung,' No. 254.) 8vo. Leipzig, 1885 Ditto.

VOLKMANN'S Sammlung klinische Vorträge:

250. *Thorn*, Ein Wort gegen die jetzt übliche Art der Anwendung des Sublimats in der Geburtshilfe.

254. *Veit*, Ueber Endometritis decidua.

WASSEIGE (Ad.). Grossesse extra-utérine abdominale; Kyste dermöide; Gastrotomie. 8vo. Bruxelles, 1885 Author.

WEIL (C.). Ueber den Descensus Testiculorum nebst Bemerkungen ueber die Entwickelung der Scheidenhaeute und des Scrotums. *plates*, 8vo. Leipzig, 1885 Purchased.

WELLS (Sir T. Spencer). The Revival of Ovariotomy and its influence on Modern Surgery. An Address delivered at Birmingham, November 5th, 1884. 8vo. Lond. 1884 Author.

Presented by

WELLS (Sir T. Spencer). Diagnosis and Surgical Treatment of Abdominal Tumours.
woodcuts, 8vo. Lond. 1885 — Author.

WEST (Charles). The Mother's Manual of Children's Diseases. 8vo. Lond. 1885 — Ditto.

TRANSACTIONS.

AMERICAN GYNECOLOGICAL SOCIETY—
Transactions, vol. ix, for 1884.
8vo. New York, 1885 — Society.

COLLEGE OF PHYSICIANS OF PHILADELPHIA—
Transactions. Third Series, vols. vi, vii.
8vo. Phila., 1883—84 — The College.

LYON—Société des Sciences Médicales, &c. Mémoires et Comptes-rendus, tome xxiii, 1883.
8vo. Lyon, 1884 — Society.

MEDICAL SOCIETY OF LONDON—
Proceedings, vols. vi, vii, 1881—1884.
8vo. Lond. 1884 — Ditto.

OBSTETRICAL SOCIETY (EDINBURGH)—
Transactions, Session 1884—85, vol. x.
8vo. Edin., 1885 — Ditto.

SMITHSONIAN INSTITUTION—
Annual Report of the Board of Regents for 1883
8vo. Washington, 1885 — Institution.

SUPPLEMENT to the Transactions of the Sei-I-Kwai, or Society for the advancement of Medical Science in Japan. Transactions, No. 36— Supplement, No. 1.— 8vo. Tokio, 1885— — Society.

JOURNALS.

Australian Medical Journal, vol. i—xxiii. [Missing Nos.—April and July vol. iv, October and December vol. ix, Title pages and Indexes vols. xx and xxii.] 8vo. Melbourne, 1856—1878 — Victoria Med. Society.

——— New Series, vol. i.— 8vo. Melbourne, 1879— — Ditto.

		Presented by
British (The) Gynæcological Journal; being the Journal of the British Gynæcological Society. Edited by Fancourt Barnes, M.D. Parts I and II.	8vo. Lond. 1885	Society.
Calendar of University College, London, for 1885—86.	8vo. Lond. 1885	Council of the College.
Year-Book (The) of Treatment for 1884. A critical review for Practitioners of Medicine and Surgery. Fourth edition.	sm. 8vo. Lond. 1885	Purchased.

REPORTS.

Australasian Sanitary Conference of Sydney, N.S.W., 1884. Report, Minutes of Proceedings and Appendix.	fo. Sydney, 1884	The Secretary.
Hospitals—Middlesex Hospital Reports for 1883.	8vo. Lond. 1885	Hospital staff.
——— St. Bartholomew's Hospital Reports; vol. xx.	8vo. Lond. 1884	Ditto.
——— ——— A general Index to the first twenty volumes, from 1865—1884.	8vo. Lond. 1885	Ditto.
——— St. Thomas's Hospital Reports; new series, vol. xiii.	8vo. Lond. 1884	Ditto.
——— University College Hospital Reports for 1883 and 1884.	8vo. Lond. 1885	Council of the College.
Lying-in Institutions—Germany: Berichte und Arbeiten aus der geburtshilflich-gynaekologischen Klinik zu Marburg. Band ii.	*plates and woodcuts*, 8vo. Leipzig, 1885	Author.

MUSEUM.

1 Pair Forceps (Conquest).	City of Lond. Lying-in Hosp.

PRINTED BY J. E. ADLARD, BARTHOLOMEW CLOSE.